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A $1,200,000 bridge goes up over Georgia's Altamaha River

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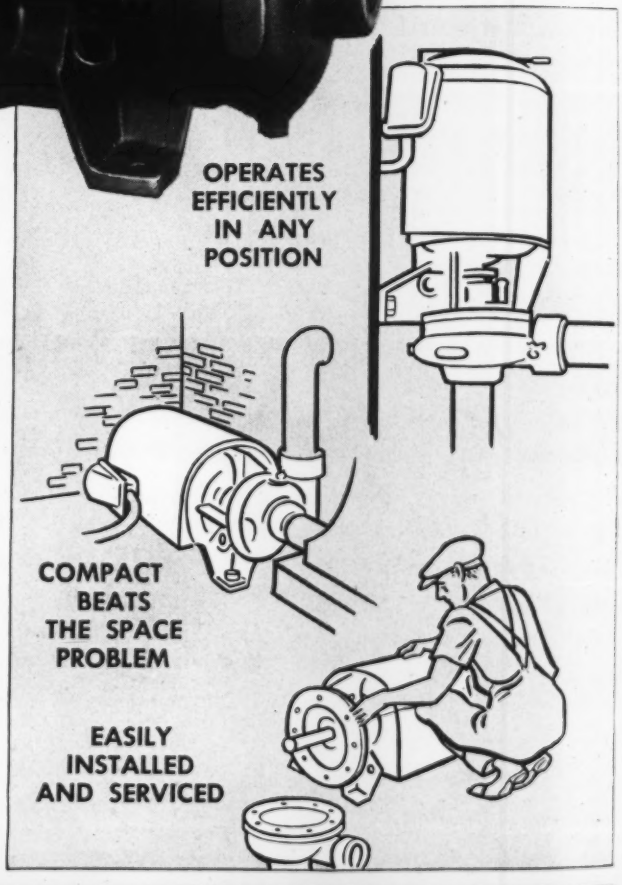

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News of the Week

ENGINEERING NEWS-RECORD • OCTOBER 24, 1946 • VOLUME 137 • NUMBER 17

OWMR allows $1.2 billion for federal construction

Reconversion office authorization boosts funds for 14 construction agencies by $300 million over President's original limit—Some programs still to be considered

Breaking through a limitation of $900,000,000 on federal construction imposed by President Truman's economy order of August 6 (*ENR* Aug. 8, vol. p. 147) the Office of War Mobilization and Reconversion last week announced it had authorized 14 federal agencies to proceed with construction valued at $1,200,000,000.

The authorization—with the programs of the Corps of Engineers, the Department of the Interior and the Department of Commerce still under advisement—brings total authorized expenditures by these departments up to within $300,000,000 of the programs originally scheduled. Spokesmen for the Bureau of the Budget—which concurred in the OWMR action—insisted, however, that these authorizations should not be compared with the President's ordered limitation on spending, since the OWMR figures represent the value of completed projects, rather than expenditures during the fiscal year. Further, budget officials pointed out, the projects cleared by OWMR include some that will be financed in part by state and local funds—and these funds are included in the OWMR figures.

Revised programs approved

The announcement had the effect of terminating the original directive, which ordered suspension of the award of all contracts for federal construction, excepting highway work, for a 60-day period. During this period, all agencies were directed to review and cut down their programs on the basis of essentiality, and then submit revised programs to the office of John R. Steelman, OWMR director, for final approval.

The agencies whose programs were approved are: The Navy Department, Veterans Administration, Federal Works Agency, Department of the Interior, Tennessee Valley Authority, Department of Agriculture, Department of Justice, Department of State, Treasury Department, Reconstruction Finance Corporation, Maritime Commission, the Panama Canal, the National Advisory Committee for Aeronautics, and the military programs of the War Department.

However, the civil-works program of the Corps of Engineers, the reclamation program of the Department of the Interior and programs of the Department of Commerce are still under review, Mr. Steelman said, with final action expected soon.

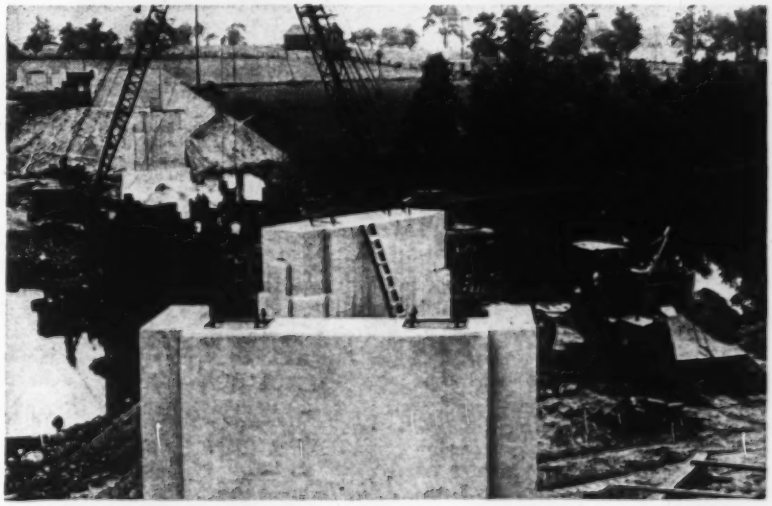
All agencies were instructed to limit put-in-place value of new construction started during the remainder of the fiscal year 1947 to about $600,000,000.

The reconversion director added that about $400,000,000 of the $600,000,000 approved for fiscal 1947 would be nonmilitary public-works projects, and that this category of work would account for about $700,000,000 of the $1.2 billion overall program authorized.

Increase for flood control

The only actual increase in cash expenditures this fiscal year for public-works construction, the Budget Bureau said, was a $35,000,000 boost approved Oct. 17 for flood-control projects on which Army engineers already have started work. In addition, the bureau said, "limited" authorizations for new flood-control projects will be granted, and an initial increase of $5,000,000 of this nature was expected to clear this week.

These new additions will increase flood-control expenditures for the current fiscal year from the $95,000,000 ceiling fixed by the President, to $135,000,000.



No Mistake—*Engineers for a $900,000, 25-mi. relocation of the Massena, N. Y., Terminal RR. put the piers they were needed, despite the unusual appearance of the piers above. One end of the bridge, which has one 47-ft., two 80-ft., one 86-ft. and three 100-ft. spans across the Raquette River, is on a 10-deg. curve, and the piers are skewed to parallel the river accounting for the odd appearance. C. E. Smith and Co., consulting engineers, St. Louis, Mo., prepared plans; Harrison Construction Co., Pittsburgh, Pa., is contractor.*

NEWS IN BRIEF

In telegraphic form, here are latest news developments on the engineering and construction front during the week.

Construction—Alumni have plans for raising $2,000,000 to construct a gymnasium and physical education plant for Vanderbilt University, Nashville, Tenn. . . . CPA has approved $600,000 of new construction for the enlargement of the DuPont Co.'s synthetic detergent plant at *Deepwater, N. J.* . . . O'Connor, Moffat Co., *San Francisco* subsidiary of R. H. Macy Co., Inc., has announced plans for a $1,500,000 addition to its department store. . . . The school board of *Seattle, Wash.*, has directed preparation of plans for six buildings estimated to cost $2,231,600, first units in a $20,000,000 program. . . . A $788,600 telephone exchange building at *Malden, Mass.*, has been authorized. . . . American Enka Corp. has awarded contracts to the H. K. Ferguson Co. for a new rayon tire yarn plant at *Lowland, Tenn.* . . . Work has started on a $1,000,000 addition to the building of the World and Tribune at *Tulsa, Okla.* . . . F. H. McGraw Co. has begun work on a plant for the Bakelite Corp. at *Ottawa, Ill.* . . . General Electric Co. will build two factories and the United Airlines a building and three hangars at *San Jose, Calif.* . . . Four projects for the enlargement and modernization of the *Syracuse, N. Y.*, state mental school have been approved by the N. Y. State Public Works Planning Commission.

Highways—From bids received Oct. 1 the highway department of *Mississippi* has awarded three contracts of nearly $700,000. . . . The Arkansas Highway Commission has approved a contract to Merritt-Chapman & Scott for construction of piers and piling foundations of the Arkansas approach of the new Mississippi River bridge at *Memphis, Tenn.* . . . The *Delaware* State Highway Department spent $1,609,000 on road repairs in the first nine months of this year. . . . Work on the first section of the new N. Y. State Thruway north of *Syracuse, N. Y.*, is ahead of schedule, grading being 80 percent complete. . . . The Washington State Highway Department has determined on the location of a new $1,750,000 steel bridge across the Columbia River at *Wenatchee*. It will be a steel arch cantilever structure 1,203 ft. in length, the main span 512 ft. . . . Contracts amounting to $1,454,926.81 covering 12.93 miles of highway improvements and two bridges have been awarded by the *Pennsylvania* Department of Highways.

Sewerage and Water Supply—Plans are under way for a $645,000 extension of the sanitary sewer system of *Winter Park, Fla.* . . . With a $66,798 contract awarded for construction of sanitary sewers in the Benjamin Bowl area of the city, *Nashville, Tenn.* has started its $3,000,000 sewer program. . . . *Boise, Ida.*, is considering bids for the preparation of plans for a $600,000 sewer system improvement. . . . The *Eugene, Ore.*, water board has announced plans for construction of a $700,000 water filtration plant and $600,000 pipeline.

Bond Issues—Citizens of *DeKalb County, Ga.*, on Oct. 29 will vote on a $4,600,000 bond issues for public improvements. . . . *Mt. Vernon, Ill.*, will vote Nov. 26 on a $600,000 bond issue for a new storm sewer system, an extension of its sanitary sewer system, and reconstruction and addition to its sewage disposal plant. . . . Commissioners of *Weber County, Utah*, have voted to submit a $1,000,000 bond issue for a war memorial building and auditorium at the November election. . . . *Gastonia, N. C.*, will soon vote on a $3,060,000 bond issue for public works improvements.

THE COVER PICTURE

Cofferdams, piers and roadway abutment rise on the north bank of the Altamaha River, 14 miles north of Baxley, Ga., where the state highway department is building a new $1,214,000 bridge.

The structure will include a 4,088 ft. main span with side spans of 288 ft. and 352 ft. each. J. G. Brock, of the Georgia highway department, is resident engineer. General contract is held by the Scott Construction Co., of Thomasville, Ga.

***Plywood glorified**—The facade of the Weldwood Building, new headquarters for United States Plywood Corp., 55 West 44th St., New York City, features panels of 26-ga. stainless-steel exterior facing bonded to 1/2-in. thick plywood. Remodeled from the former City Club, the entire structure is intended as a practical demonstration of new uses and new methods of application of plywood. In addition to plywood walls, floors, ceilings and built-in furniture of various woods and finishes, combinations of veneers with sheet metal or fabric backings are included, for forming curved surfaces.*

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OK limited civilian use of Alaska road

The Alaska Highway is now open to civilians, its full length although with certain restrictions. In excellent condition it will be kept open all winter by the Royal Canadian Engineers, the Public Roads Administration reported early last week.

There is bus service now over the entire 1,600 miles of the road three times a week, and there are gasoline stations spaced at 150-mile intervals. The gravel surfacing is 24 ft. wide or wider. In certain places grades are as much as 7 percent and in some short sections even steeper, but generally the highway has grades less than 7 percent and has easy curves.

United States or Canadian armed forces personnel do not require permits on the highway when they are traveling on orders. Those who do require permits include duly accredited representatives of the United States or Canadian governments on government business; members of church, press, radio or film boards, who first obtain credentials from their respective governments; prospectors, who must show that they are organized and able to supply themselves with transportation, gasoline, oil and necessary vehicle repairs and spare parts; also food and shelter without requiring assistance from the Northwest Highway System (Canadian Army). Restrictions have been modified to permit passage over the highway of properly-organized hunting parties accompanied by qualified guides.

Before a permit is granted, the applicant's vehicle is examined for roadworthiness and the examining officer's decision is final. Consequently, the vehicle must be in good mechanical condition.

Travelers must carry sufficient spare tires, tubes, car tools, etc., for their own needs as there is no source of supply along the highway. Service repair shops for civilian vehicles are nonexistent, and overnight accommodation is very limited. Petroleum products and hot meals may be obtained at certain points, other than government installations, between Dawson City and the Canada-Alaska border.

Lumbermen see federal forest control

The outlook of lumber producers and dealers regarding the nation's timber resources is shifting from optimism to pessimism, it became apparent recently at a Washington, D. C., meeting of the American Forest Congress.

Faced with the largest demand in history, lumbermen forecast government regulation of private forest cutting, they said as they sat down with government officials and labor representatives to discuss industry prospects.

Pointing out that the annual cut of 30 billion feet, maintained during the last five years, is too much for the private forests, industry leaders somewhat reluctantly admitted that some government regulation of the cut will be necessary if their long-time objective of selective cutting to maintain a balance in production is not to be completely undermined. They also suggested that the government allow more selective cutting of mature trees on public lands, as a means of meeting the present emergency.

The conferees considered a program prepared last July, in which the lumbermen recommended that government "custody" of private forest lands be placed in the hands of the states rather than the federal government, and urging a "thorough going" investigation of public land policies and administration with a view towards adoption of a comprehensive national policy.

This proposal brought a violent reaction from Lyle F. Watts, chief of the U. S. Forest Service, who countered with the statement that additional forest acreage should be put in the hands of the federal government, and that an "acceptable forest management policy" should be enforced if more lumber is to be forthcoming.

"The solution lies primarily not on public lands which occupy only a fourth of the land," Mr. Watts said, "but on private lands, which occupy three-fourths of the land and are, in the main, poorly managed. The principal forest problem is to get satisfactory forest management on private lands—especially on small private holdings."

Representatives of the Congress of Industrial Organizations have entered the debate on the side of the government, contending that the way to stimulate timber production is to institute federal regulation of commercial cutting. CIO is already on record in support of the Hook bill, introduced into the House of Representatives last April, which contains many stringent federal controls objectionable to the private owners.

ARBA announces names of nominees for 1947

Official nominations of officers of the American Road Builders' Association for 1947 were announced last week. Nominees are:

For president: J. T. Callaway, assistant to vice-president, Goodyear Tire & Rubber Co., Chicago, Ill.; for vice-presidents: Paul B. Reinhold, president, Atlas Equipment Co., Pittsburgh, Pa.; Charles W. Smith, president, Smith Engineering & Construction Co., Pensacola, Fla.; W. A. Roberts, vice-president, Allis-Chalmers Mfg. Co., Milwaukee, Wis.; Robert A. Allen, state highway engineer, Carson City, Nev.; for treasurer: H. C. Whitehurst, director of highways, District of Columbia, Washington, D. C.

For directors (term ending 1950): James C. Alban, president, Alban Tractor Co., Baltimore, Md.; Perry T. Ford, director of highways, Columbus, Ohio; Frederick Hoitt, secretary, New England Road Builders' Association, Boston, Mass.; E. R. Needles, Howard, Needles-Tammen & Bergendoff, consulting engineers, New York, N. Y.; C. W. Phillips, commissioner of highways and public works, Nashville, Tenn.; Walter Toebe, executive secretary, Michigan Road Builders Association, Lansing, Mich.; and Charles M. Upham, engineer-director, American Road Builders' Association, Washington, D. C.

Election will be by mail balloting later in the year.

Big contract awarded for Bayshore freeway

What is said to be the largest single highway construction contract in California history was awarded recently when C. H. Purcell, director of public works, announced the $2,993,000 joint bid of Morrison-Knudsen Construction Co. and Macco Construction Co. for 5.1 miles of the San Francisco Bayshore freeway had been accepted.

The 6-lane highway will be composed of two roadbeds 53 ft. wide and separated by a division strip of from 20 to 26 ft. The work includes necessary approach ramps, acceleration and deceleration lanes and outer highways. All interchange structures will be built under separate contracts.

The new project will be located three-quarters of a mile west of the present highway to allow for expansion of the San Francisco airport and for the relocation the city will spend $1,250,000 from the $20,000,000 voted for airport improvement a year ago.

DEVELOPMENTS BEYOND U. S. BORDERS

Digested from reports by Engineering News-Record correspondents and the McGraw-Hill World News Bureau

Britain approves 12 types of permanent housing construction for government subsidy—India plans $200,000,000 irrigation and power scheme—Plan reconstruction of Kiev, Ukranian capitol

England—As result of recent experience in the construction of non-traditional houses, the British Ministry of Health recently approved some 12 types of permanent housing, production of which will be subsidized by funds provided by the government.

In announcing the availability of these dwellings to local housing authorities, the ministry said that the structures will require less scarce construction materials and skilled craftsmen than traditional types, and can be erected more quickly. Agreements are being made with the sponsors of the approved systems, under which they—or selected contractors—undertake to build in appropriate areas during the next year a prearranged number of dwellings, with standard plans and specifications and at fixed prices.

The approved houses are: British Iron and Steel Foundation, Airey Rural, British Steel Construction, Cussins, Dyke C.C.C., Easiform, Orlit, Scottwood, Steane, Unity, Wates, and Wimpey "No Fines".

The BISF two-story house has a steel frame and cavity-type exterior walls, with the frame placed in the cavity. A concrete slab 2 in. thick on waterproof membrane, supported by mass concrete on crushed stone is used for the ground floor construction, with a second floor of 2-in. thick concrete on steel joists. Supported on steel trusses, the roof is composed of protected metal sheets and fiberboard insulation.

The Airey Rural House (*ENR* June 20, vol. p. 951) has a concrete frame faced with precast concrete slabs and topped by a timber roof.

Exterior walls of the BSC house consist of 2-ft. wide foamed-slag concrete panels, faced with 1¼ in. thick clay tiles. Floors and roof are of timber. Speedy erection is attained by the use of specially designed gantrys, which circumscribe the structure and are used as scaffolds and for hoisting wall units.

The Cussins house utilizes concrete slabs faced with tile, in conjunction with a steel frame composed of box-section members fabricated from hot-rolled channels. The units have an overall thickness of 2¼ in. and are insulated with a 2-in. wood wool slab.

Has concrete columns

Frame of the Dyke C.C.C. house consists of 9 x 9-in. precast concrete columns and inverted tee-beams. For the first story, the exterior wall consists of 1-ft. 7-in. by 4-ft. concrete slabs, 2 in. thick, reinforced with 1½ in. vertical and horizontal ribs, faced with lightweight concrete. Overhanging the first story, the second story wall utilizes 2½ in. slabs with 3½ in. ribs.

Cast in place, the Easiform house has a 9-in. cavity wall, composed of two 3½ in. concrete walls, reinforced with ⅜ in. steel bars above and below windows.

The Orlit house utilizes a frame consisting of 5½ in. square precast concrete posts, spaced 10 to 12 ft. on centers with steel-plate bolted connections above each floor level and precast beams 5½ x 8 in. at floor level. Formed of 4 ft. x 1 ft. 4-in. reinforced concrete slabs, the exterior wall is of the cavity type.

Scotwood houses are built of resin-bonded "stressed skin" plywood panels, with exterior walls 3½ in. thick, consisting of two ⅜ in. plywood faces of story height glued to timber studs spaced 17 in on centers.

To form the Steane house, 4-ft. square panels of 1-in. thick reinforced concrete faced with 1 in. thick clay tiles are bolted to a light steel frame. The interior facing consists of 2 in. breeze concrete slabs. Wood floors rest on composite steel and timber joists.

Faced externally with precast concrete slabs, the Unity House has a frame of concrete posts spaced 3 ft. on centers, with pressed steel beams at second floor and eaves levels.

The exterior walls of the Wates house are composed of 1¼ in. thick precast concrete tray shaped panels, 7 ft. 6 in. high and 2, 3 and 4 ft. wide. Filled with breeze concrete to a thickness of 6 in., the panels come to the site with door frames in place.

The Wimpey house rests on two 4½ in. brick foundation walls, with a 3-in. cavity filled with concrete. Exterior

***Approved Houses**—Included among the twelve types of permanent housing approved by the British government are these two variations of the family structure built by the British Iron and Steel Foundation.*

walls are 12-in. "no fines" concrete reinforced with three ½ in. steel bars above window openings and with a 9-in. concrete beam at the top. The wood forms, faced with expanded metal, extend to full wall height, and are placed by a light crane.

Australia—Some 189 U. S. Navy barges are being converted into houseboats by a Sydney company to help alleviate the city's acute housing shortage. Three types of houseboat are being built, to sell for from $2,400 to $4,800. Single-story boats will accommodate six persons, and double story structures will house 12.

Reconstruction . . . .

Russia—Struggling to erase the ugly scars of the recent war, Kiev, capital of the Russian Ukraine, has launched a 15-year general reconstruction program which will see the rebuilding of large portions of the city.

Included in the reconstruction plans are two subway lines, piping of nearby natural gas resources to the city for industrial and home use; and reconstruction of many streets, parks and public buildings.

China—The first major postwar construction in China by private enterprise will be a 1,600-seat motion picture theater, planned for erection in Shanghai by the Metro-Goldwyn-Mayer Corp. The theater will be a part of a ten-story structure which will include studios, offices, film vaults and apartments for Shanghai-based staff members.

India—Construction of a new Indian National War Academy, to cost about $50,000,000 is expected to be approved soon by the Central Government, in accordance with plans drawn up by a committee headed by Sir Claude Auchinleck, commander in chief of forces in India. An 8,000 acre site near Poona has been selected.

Power . . . .

Norway—Nine hundred men, working in three shifts, are pushing the construction of one of Norway's largest hydro-electric ventures—the Hol project in the valley of the Hallingdals River, 117 miles northwest of Oslo.

The first two of four construction stages will be completed during 1948, at which time Oslo's electrical supplies will be increased by more than half.

The project calls for utilizing all rivers, streams and lakes in a 743-sq. mi. area through a huge reservoir system, and using a 1,200 ft. drop through tunnels to generate power. Nine dams will be constructed in all—the largest being the Stolsvanns Dam which will be more than 2,500 ft. in length and 70 ft. high.

***World Engineers**—Delegates to a recent engineering conference at Paris (ENR Oct. 3, vol. p. 420) there signed agreements to participate in a World Engineering Conference to represent various engineering societies of all countries. Surrounded by delegates from twenty countries, Aristide Antoine, former president of the Union of French Engineers and interim president of the new organization, puts his signature to the agreement.*

India—Construction of a huge new power and irrigation project which will cost about $200,000,000 is due to start soon in Sind Province, on the lower Indus River.

To be called the Lower Sind Barrage, the dam will impound waters of the Indus four and a half miles above the town of Kotri. The dam will be 2,500 ft. long, and is expected to provide irrigation water for some 3,000,000 acres of land in the area.

The dam and its appurtenant canals and locks will be built in two stages over a 20-year period.

China—Preliminary work on the quarter-billion dollar Yangtze Dam near Ichang (*ENR* Feb. 28, vol. p. 310) will begin before the end of the current year. A group of engineers are expected in China next month to begin diamond drilling at the site.

Miscellany . . . .

Mexico—Despite all efforts of the Mexican federal government, scarcity of cement has forced suspension of allotments of the product for private use in Mexico City. Lack of oil to burn clinkers at the government operated Cementos Mixcoac plant in the city was given as reason for curtailment. All products of the plant are now being routed to city projects.

Venezuela—The city of Maracaibo, second largest in Venezuela, has formed a committee to obtain funds for construction of a new water system. The state of Zulia, in which the city is located, has already contributed $30,000 to the scheme, and local industrial establishments are expected to contribute.

Transport . . . .

Australia—Preliminary plans for creation of an all-weather harbor at Portland on the south coast of Australia, 226 miles west of Melbourne, have been announced by the government of Victoria State. The plan provides for four general cargo berths, two tanker berths, a fisherman's quay. At present, the port boasts only one pier—exposed to heavy ocean swells.

Mexico—Mexico's most ambitious recent railroad construction project—construction of a network of about 5,000 miles of road was announced recently by the Ministry of Communications. The program is expected to take 18 years to complete. An annual appropriation of about $14,500,000 will be asked to finance the plan.

China—Reconstruction of the Yellow River Bridge north of Chenghsien on the Peiping-Hankow Railroad will be done by Morrison-Knudsen Co., Inc., according to an announcement by the Chinese government.

ASCE considers increase in its dues and sets up new regional office

Engineers at fall meeting warned of their obligations to keep nation's military potential at high level—Nominate new president

An increase of $5 in the dues of corporate members of the American Society of Civil Engineers is to be proposed to the membership by the board of direction in order to make it possible for the society to meet the increased demands upon its services. This decision was approved at a fall meeting of the board, held in Kansas City, Mo., Oct. 14-15 in advance of the society's regular fall meeting.

The cost of meeting current demands on the society are in excess of its current income, William J. Carey, executive secretary, reported to the board, but that board decided to adopt a deficit budget for 1947 rather than curtail society activities, pending an increase in dues—which must be authorized by constitutional amendment.

An increase of $2.50 in the dues for juniors also was proposed. Current dues schedules have been in effect since 1921.

Recently, the board authorized a charge of $2 for paper-bound copies of the society's *Transactions* as a means of offsetting some of the increased printing costs.

Office in Chicago

Establishment of a field office in Chicago to make the society more easily accessible to members in the midwest was approved by the board, and George S. Salter was appointed midwestern secretary to take charge. Mr. Salter was formerly structural designer with the Department of Subways and Superhighways, Chicago, and, for the last three years projects engineer with the Chicago Engineer Board of Review.

The other two field headquarters are located in Washington, D. C., and in Los Angeles, Calif., under the direction of field secretaries E. Lawrence Chandler and W. E. Jessup, respectively.

The board of direction elected the following members to honorary membership in the society: Charles B. Burdick and LeRoy K. Sherman, both of Chicago; Albert P. Greensfelder, St. Louis; and Asa W. K. Billings, Brazil.

Recommend higher salary rates

Other actions of the board of direction included the adoption of an interim report by the committee on salaries, recommending substantial increases in salaries of engineers in the various classifications above those salaries adopted by the board two years ago. Details of the proposed increases will be given in a subsequent issue.

The 3-point policy of labor relations presented at the Seattle meeting last summer (*ENR* July 25, vol. p. 85) was adopted by the board, and it will be recommended to the Engineers' Joint Council with a view toward its adoption by that organization. The board also decided to discontinue at the end of this year the war-time policy of cancelling dues of members in the military service.

Official approval was given by the board of direction to holding the 1947 spring meeting at Phoenix, Ariz., in April; the summer convention at Duluth, Minn., in July and fall meeting at New Orleans, La., in October, 1947.

Military responsibility stressed

At the opening session of the society's fall meeting, Maj. Gen. H. S. Aurand, director of research and development of the general staff of the War Department, spoke on the subject of keeping this nation strong. "Engineers and scientists of other nations are making a supreme effort to place their military potential at the top," said General Aurand, "and whether or not we stay ahead is largely the responsibility of you engineers."

General Aurand went on to outline the manner in which individual engineers and scientific organizations will be expected to cooperate with the War Department's Division of Research and Development. He urged the various engineering societies to establish separate bodies for the consideration of national security problems, and to join with other societies for the same purpose. He pledged the full cooperation of his department in this undertaking, while stressing the urgency of continually decreasing the time lag between the availability of scientific information and its useful application.

"It is common knowledge," continued General Aurand, "that World War II brought the scientist and his laboratory into almost complete mobilization in the interest of national security. However, the scientists themselves believe that practically none of the *basic research* done during the recent war was utilized in its conduct or made available on the battlefront.

"Consequently, the engineer and the scientist are faced with two grave problems at the moment: (1) to apply militarily to our national defense that basic information discovered during World War II and (2) to arrange that, in the event of a future emergency, scientific information can be given military application in a very much shorter time."

As an illustration of what the engineer is likely to be called upon to cope with in planning for national security, General Aurand cited one of our major industries—steel. Although well established in three large centers, Pittsburgh, Chicago and Birmingham, it has not yet reached its full capacity. In planning the growth of this industry, or the adaptation of new scientific discoveries to it, the engineer should consider the necessity of having these three areas completely independent, and arranged to produce all the products needed in an emergency.

"The demand for trained engineers," concluded General Aurand, "has perhaps never been greater in the history of our country. The armed forces are asking for outstanding engineers to serve on advisory panels, and they are inviting engineering societies to undertake the solution of national defense problems."

Summaries of other papers presented at the technical division meetings will be given in a subsequent issue.

***To Head ASCE**—Edgar M. Hastings, 64, chief engineer since 1922 of the Richmond, Fredericksburg and Potomac R. R. was nominated for the presidency of the American Society of Civil Engineers at the organization's fall meeting at Kansas City, Mo. A past vice-president (1943-44) of ASCE, Mr. Hastings was president of the American Railway Engineering Association (1939-40) and has long been active in professional engineering society affairs. A graduate of Baltimore Polytechnic Institute, he joined the railroad in 1903, and has served with it continuously.*

Restudy of engineering schools to be postponed by ECPD committee

Teaching load on professors makes re-examination of engineering curricula impracticable at this time

Reviews of the curricula of engineering schools accredited by the Engineers' Council for Professional Development cannot be made at this time, according to a report made to ECPD by its Committee on Engineering Schools at the council's annual meeting held in New York Oct. 18-19. Originally it was proposed to begin this reexamination in the current academic year, but D. B. Prentice, chairman of the committee, said that the engineering teachers who would have to make the restudy are so overloaded as to make that impracticable. To date, 502 curricula in 133 schools have been fully accredited.

Professor Prentice reported considerable interest among engineering schools in South America in some form of accrediting or certification as an aid to their students who wish to continue their studies in this country.

Accrediting of technical institutes, which is a new undertaking of ECPD, is progressing slowly, Professor Prentice said, chiefly because few applications for accrediting have been received. Four institutes have had courses accredited and seven more are in process.

Study of engineering students

Very satisfactory progress was reported by the Committee on Student Selection and Guidance on a study of the general characteristics and educational background of freshmen in engineering schools as a mean for guiding those students in their future work. Financed by the Carnegie Foundation for the Advancement of Teaching, the examinations for this "Pre-Engineering Inventory" were given to 12,300 students in 32 schools in the period 1945-46. Many more schools now are being asked to participate.

Experience since the examinations were begun in 1943-44 has shown them to be such a satisfactory measure of a student's abilities that it now is planned to conduct "sophomore achievement examinations" and ultimately to set up similar examinations for evaluation of the ability of students as they near the completion of their course. These latter tests, the committee believes, will be of value both to the students and their prospective employers. They also should give a measure of the curricula of the schools in which the students are studying.

Extension of this type of examination to the high schools is under consideration as a means for checking the flow of poorly qualified students to the engineering schools and for indicating possible improvements in secondary school training for engineering students.

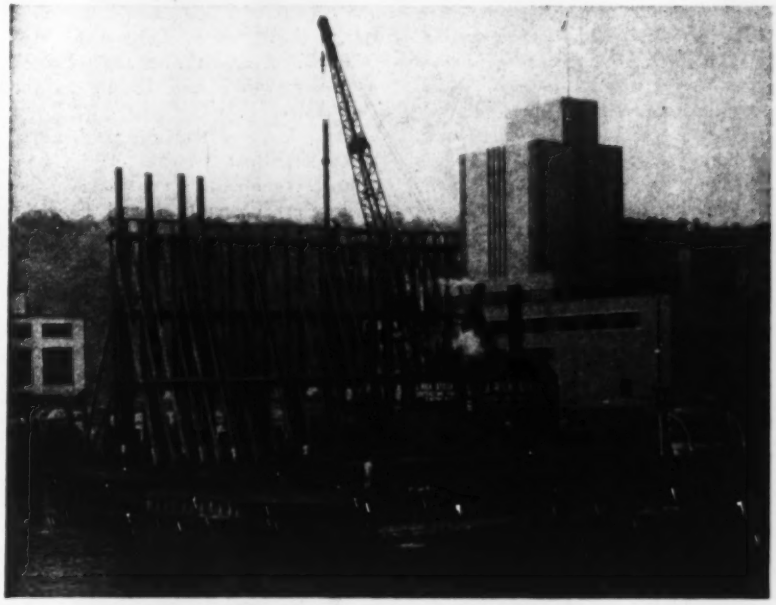
Uniform member grades

A recommendation from the Committee on Professional Recognition that ECPD work actively for adoption of uniform grades of membership resulted in instructions to the committee to review the grades proposed by ECPD to the constituent societies in 1933 to the end that those recommendations or modifications of them could be proposed to the several societies for adoption at an early date. In discussion, it was reported that the AIEE, at its recent meeting in Detroit, had approved the ECPD grades in principle and had expressed willingness to conform to grades proposed by ECPD; also that the ASCE has been restudying its system of grading members.

D. C. Jackson, chairman of the Committee on Principles of Engineering Ethics, reported that some progress was made during the year toward adoption of the ECPD canons of ethics. Among the five major societies, the canons have been approved by the ASME and the AIEE; a modified draft has been approved in principle by the ASCE.

Further work on a listing of engineering societies was authorized in the hope that ECPD may be able to develop a record that will be of wide value to the engineering profession. Tabulation of all known societies, both local and national totaling 237, was begun during the year at the request of the Engineers' Joint Council. This listing is to be continued and amplified.

J. W. Parker, president of the Detroit Edison Co., was elected chairman of ECPD to succeed Everett S. Lee, engineer-in-charge of the general engineering and consulting laboratory of the General Electric Co., Schenectady, N. Y. T. T. Read, professor of mining engineering at Columbia University, was named vice-chairman, and H. H. Henline, secretary of the AIEE, succeeds William J. Carey, secretary of the ASCE, as secretary of ECPD.



***Thirteen-lead Driver**—H-sections up to 200 ft. long are being driven at Edgewater, N. J., (opposite 116th St., New York City) to support a rail-to-ship transfer pier for Seatrain Lines, Inc. Each bent of the 600 ft. pier has thirteen 4 in., 89 lb. per ft. piles, spaced irregularly to support the 90 ft. wide deck. The thirteen leads are spaced to match the pile spacing and mounted over the side of a barge. A derrick sets the piles in the leads, sometimes in two lengths that are welded together, and then uses a single heavy pile hammer to drive successively each of the piles in the bent. Harder Barbato & Ciampa are engineers; J. Rich Steers, Inc., is contractor.*

Navy rebuilding German test tunnels for experiments in supersonic speeds

Installation under construction at White Oak, Md., includes improvements on original rocket-weapon testing design

Three German supersonic wind tunnels of a design unique to the United States and believed by U. S. Navy engineers to be superior to other known types have been brought from Germany and are now being installed in a new building at the U. S. Naval Ordnance Laboratory at White Oak, Md.

The tunnels were built by German scientists at Peenemunde, famous rocket research station, and later moved to Kochel in Bavaria.

The accompanying artist's sketch shows the layout of the 150x170 ft. building being built to house the apparatus, and the 52-ft. dia. steel sphere to which the tunnels will be connected. Tunnel operation is made possible by creating a vacuum in the sphere and allowing air to flow through the tunnels into the sphere.

The two tunnels at the left are of a design providing intermittent operation, the test section of each measuring 15.75 x15.75 in. Continuous operation is possible with the tunnel at the right, which has a 7x7 in. test section. Each of the three tunnels is an open air circuit.

The decision to reconstruct the tunnels in the United States was made when Navy engineers decided the tunnels were superior to any others now in existence, and thus would be useful for many years in the development of projectiles, rockets, bombs and guided missiles intended for use at speeds greater than sound. The fact that Germany was far ahead of other countries in the field of supersonic aerodynamics becomes obvious when it is considered that the entire work on the famous V-2 rocket was completed in these tunnels in 1941, at least two years before construction of any tunnel of comparable size was started in the United States. Measurements for the V-2 rocket covered the entire range of supersonic speeds up to Mach number 4.4 (4.4 times sound velocity) as well as the performance at subsonic velocities.

A striking feature of the Kochel tunnel design is the economy made possible by the ingenious method of intermittent operation of the two large tunnels which require only a fraction of the power needed for a continuous tunnel of comparable size. They are operated at less than atmospheric pressure, using free air for the air supply entering the test section. This air is dried by passage through a large bed of absorbent material before entering the test section. It is discharged from the tunnel's test section into the large sphere through a discharge valve containing a second throat and a quick operating valve—also known as the Polte valve.

These last two items are the heart of the intermittent system. The sphere is first evacuated to a pressure of a few millimeters of mercury and then the quick operating Polte valve is opened.

Atmospheric air enters the drier at low velocity and is dried to a relative humidity of less than 5 percent. The velocity of the air increases slowly as the channel is constricted to the size of the test section, and then reaches the velocity of sound in the throat of the supersonic nozzle. Beyond the throat the cross section of the nozzle increases in a precise manner to the final size of the test section. The air expands in this divergent section of the nozzle because of the very low pressure in the test section and, in expanding, its velocity increases above that of sound.

The test section conditions within the large tunnels are, therefore, characterized by very low temperatures and pressures, and the velocity of sound in the test section is accordingly lower than in air under atmospheric conditions. The velocity of the air relative to sound velocity in the test section is constant, and depends only on the relative size of the throat and end of the nozzle.

Flow at the end of the nozzle is laminar, and scale models are placed at this point to determine the aerodynamic forces acting on them.

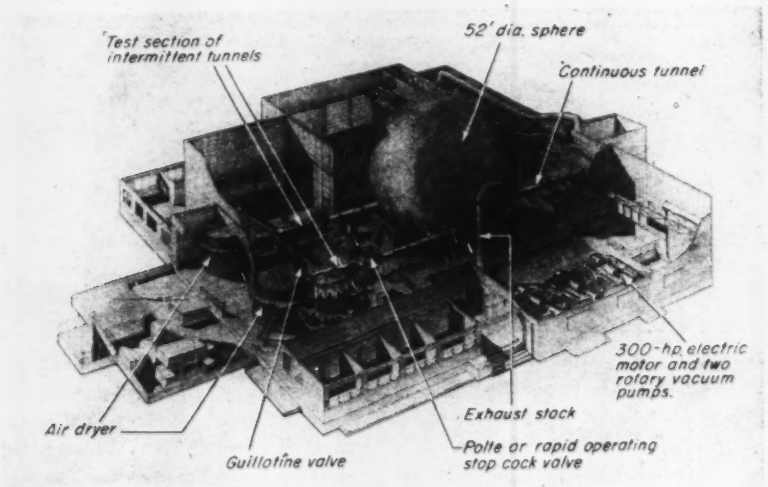
The normal shock wave which ordinarily characterizes the transition from supersonic to subsonic velocity occurs beyond the second throat in the intermittent tunnels. Since pressure can be transmitted at no velocity greater than that of sound, this normal shock wave isolates the entire test section between the first and second throats from any influence from the fact that the sphere pressure is increasing during the test run. As a result, conditions in the test section are constant throughout the run.

Design of the continuous operating tunnel is much the same, except that a slow-acting gate valve is installed instead of a quick-acting valve between the tunnel's test section and the sphere.

Another striking feature of the design of all three tunnels is the flexibility of the test section construction. This design permits instant access to the models and the instrumentation from above, below or either side.

With the improvements being incorporated during reconstruction of the tunnels at White Oak, it is expected that the intermittent tunnels will be in full operation in the next year although the continuous tunnel may not be completed at that time.

Nine key German scientists are assisting Lyman C. Fisher, project engineer for the Naval Ordnance Laboratory, and Malcolm Rice, of the architectural firm of Eggers and Higgins of New York on reconstruction. The Charles H. Tompkins Co., Washington, D. C., is general contractor.



***Supersonic Wind Tunnel**—Now under erection at the Navy's White Oak, Md., Ordnance Laboratory is a building that will house three German supersonic wind tunnels, as shown in the cutaway drawing.*

E. J. CLEARY . . .

Letter From Latin America

. . . . In which ENR's wandering executive editor comments on high cost of living and oil, and on hotel veranda interludes

El Sombrero, Venezuela—"The Hat" (no association with former Mayor La Guardia of New York) is the home office of the Creole Petroleum Corp., subsidiary of the Standard Oil Co. of N. J.

Near El Sombrero—which is some 40 miles southeast of Caracas—Creole has established a "wildcat" camp for the exploration of what is hoped will prove to be a new and great oil field in central Venezuela. The town also is the terminal of a new road being built northeastward for a distance of some 190 miles to reach the Caribbean seaport of Guanta. The camp itself is located 10 miles out on this road.

Not the least interesting feature of the highway (*ENR* May 23, vol. p. 816) is the fact that this $8,000,000 investment is being financed by ten other oil companies—all of them having concessions in the area—in addition to Creole.

"Faith," says the Bible, "is the substance of things hoped for . . . not seen." And it is this type of faith, say the Creole people, that is being exhibited. Oil has not yet been found. But according to geological studies, the area shows characteristics that are associated with the presence of oil.

With the knowledge that already some $6,000,000 to $7,000,000 has been spent by Creole on the road and the camp, one gains an appreciation of how much it costs just to "discover" oil.

Living is high

Although I am acquainted with the high cost of everything in Venezuela (examples: Ford cars, $2,100; white shirts $8; cigarettes 66c. a pack), I wasn't prepared to learn that the workers' quarters cost from $4,000 to $5,000 a family unit. These houses are prefabricated one-story steel, made in the U. S. Each house consists of two family units, and each unit has two bedrooms, a bath and a kitchen, with laundry facilities on the rear outside wall. About thirty of these houses, along with a few of a similar type made entirely of brick, are now occupied, and others were being completed.

Venezuelan laws concerning labor are quite stringent, and, among other things, call for certain minimum standards of housing. The houses being erected by Creole are designed in accordance with these standards. Parenthetically, it might be added that the labor camp housing stands in considerable contrast to the adobe huts with thatched roofs that serve as housing for those who live outside the camp.

". . Of course, there's a hard way"

The brick houses, which will feature the permanent layout if oil is discovered, cost about $20,000 each!

Caracas (Later) — In Venezuela there are two ways in which to cover the activities of North American engineers and contractors. One is to go out in the field and do it the hard way. The other is to sit on the terrace or in the cocktail lounge of the Hotel Avila.

Sooner or later everybody turns up at the Avila, which is a modernistic retreat high on a hill overlooking the city. Probably to make certain that you don't miss anything that goes on, the outside wall of virtually every room is framed in plate glass from ceiling to floor.

It was my good fortune to sample both methods of coverage on some current activities. On week days I am in the field, and over weekends I stay at the Avila. Both places are equally productive of information. And the oncoming of the dry season seems much more apparent in the field than at the Avila, somehow.

My earliest contact at the hotel was with Roy M. Harris, former state sanitary engineer of Washington, who had arrived to assume his new post as sanitary engineer for the Creole Petroleum Corp. His recent three-year experience as a Navy Civil Engineer Corps commodore in the Pacific area leaves him no stranger to conditions in the tropics.

One of the best posted men on the life, habits, conduct and aspirations of U. S. contractors is R. R. Ellis, South American manager for the Frederick Snare Corp. of New York. Genial Bob Ellis has spent many years in Latin America directing scores of port works, plans and other heavy construction projects.

A few days earlier—on Oct. 8—the contract had been signed for construction of the Guayaquil, Ecuador, water supply system. The Frederick Snare Corp. will handle the administration of funds and construction of this work, which is being financed through a $4,000,000 U. S. Export-Import Bank loan to the municipality. The firm of Buck, Seifert and Jost of New York City will assist in the design of the system, and The Pitometer Co. will act as consultants.

The Guayaquil supply will be taken from the Daule River, at a point some 17 miles from the city; the type of pipeline has not yet been decided. A treatment plant, storage reservoirs and a new distribution system will also be built.

Lots of concrete pipe

Providing a thoroughly sound reason for ordering another round of "El Presidente's" (a delightful concoction made with rum and vermouth) Bill Brend, manager of the Lock Joint Pipe Co. said he had just signed a $1,500,000 contract with the Venezuelan National Institute of Sanitary Works for furnishing 60,000 ft. of 42-in. prestressed concrete pipe.

This pipe will serve as the main supply line from the new Macarao diversion dam and intake into Caracas (see *ENR* Feb. 21, vol. p. 298).

It's a good idea always to have your notebook ready at the Avila. And you always have something to put into it from such men as J. R. McAuliffe, construction manager, and P. F. Charles, chief engineer, both of Bechtel Bros.—McCone, S. A.; Frank Holzer of Fay, Spofford & Thorndike, and A. H. Sauerbrun, of Merritt, Chapman & Scott.

The thing to do, therefore, is to stop writing and go to the cocktail lounge for an "El Presidente".

ENGINEERING SCHOOL NEWS

Cincinnati observes 40th anniversary of Schneider plan—Continued large enrollments in engineering schools—First woman faculty member at Cooper Union school of engineering

On Oct. 16 the University of Cincinnati observed the fortieth anniversary of the establishment of its co-operative system of technological education through which students spend alternating periods in campus classroom and laboratory learning theory and in industry, business, and government correlating that theory in practice.

The program paid tribute to the system's founder, the late Dean Herman Schneider, who shortly after the turn of the century when he was an instructor at Lehigh University, Bethlehem, Pa., got his idea for bridging the gap between college and industry. He long had sought a plan which would increase the novice engineer's effectiveness and avoid the risk of disappointments through inability to link up textbook-learned theory with on-the-job practice.

Going to the University of Cincinnati as assistant professor of civil engineering, he was given permission to try out his co-operative system, with 26 students. Today, at the University of Cincinnati alone, nearly 4,000 students are studying under the "co-op" system in the colleges of engineering, business administration, and applied arts, and thousands more are enrolled in some 50 other colleges and universities where the Cincinnati system has been adopted.

Thirty recent additions to the faculty have been made by the Newark, N. J., College of Engineering to handle the unprecedented fall enrollment of 1,400 day and 900 evening students. The teaching staff of 120 has tripled in the last year. Of the new men, 13 hold professorial rank.

At the University of California the college of engineering has an enrollment for the fall quarter of 3,500 students. This is about double the enrollment of last semester which was 1,800 and greatly exceeds the maximum prewar enrollment (1939) which was only 2,100. The university is expecting peak engineering enrollment in 1947.

At Stanford University enrollment in the engineering school for the fall term reached a total of 1,198. This is 70 percent above 1941-42. There are 41 graduate students in the department of civil engineering from 18 different undergraduate schools. Total enrollment in all departments at Stanford this fall reached the all-time high of 7,200.

Purdue University, LaFayette, Ind., has 6,000 students enrolled in engineering courses, out of a total of 11,500 students. There are 1,000 students registered in off-camps branches giving freshman engineering courses.

Engineering courses will be given at the new branch of the University of Illinois, at Galesburg, Ill., where a second off-main campus extension has been established with Fred R. Hamilton, formerly president of Bradley Institute, as dean in charge. The building of the former Mayo General Army Clinic will be used, as well as equipment left by the Army. Instruction at Galesburg will begin with the opening of the second semester in February, 1947.

Mrs. Mary Blade, whose appointment was announced lately by Dean George F. Bateman, is the first woman faculty member in the Cooper Union School of Engineering's 87 years. Mrs. Blade, 33, will be an instructor in machine drawing. Formerly she was on the administrative staff of the United States Employment Service, and previous to that she was on the engineering faculty at the College of Puget Sound in Tacoma, Wash., where she taught engineering drawing and physics. She is a graduate of the University of Utah.

Funds for the proposed construction of a new engineering school building are included in a request to be submitted to the 1947 state legislature of North Carolina for an appropriation of $3,500,000 for construction at the North Carolina State College. E. I. Brown, James Litchford and Lester Skowronek are new civil engineering faculty appointees at the college.

Quintin B. Graves, previously with the civil engineering department of the University of Texas, is now teaching hydraulics and sanitary engineering at Oklahoma Agricultural and Mechanical College, Stillwater. He was graduated from the University of Kansas in civil engineering in 1931 and received his Master of Science degree in sanitary engineering from the State University of Iowa in 1932. From 1935 to 1937 he was employed by the flood control section of the Tennessee Valley Authority.

About 6,000 students are registered this year in the Institute of Technology at the University of Minnesota.

John K. Vennard, formerly associate professor of fluid mechanics at New York University, has been named associate professor of civil engineering at Stanford University. He took his master's degree at the Massachusetts Institute of Technology in 1932.

Prof. Hal Sutherland, head of the department of civil engineering at Lehigh University, is director of the Fritz Engineering Laboratory there. The work in structures and materials is under the supervision of Bruce G. Johnston, associate director of the laboratory.

Registration in the Faculty of Applied Science and Engineering of the University of Toronto has now exceeded 4,200. This represents about seven times the average pre-war registration in the department and is due almost entirely to the large influx of ex-service men and women students.

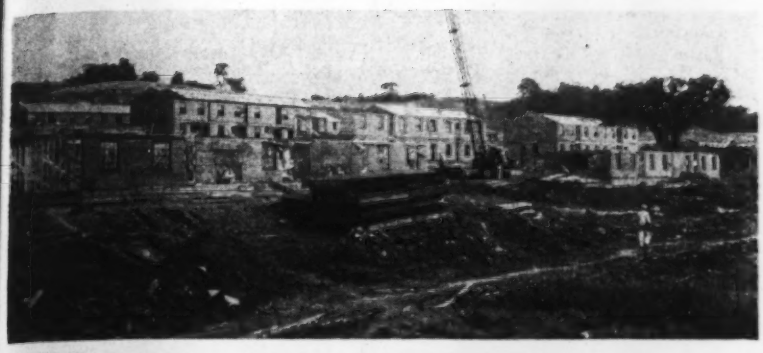
Convert Syracuse plant into college building

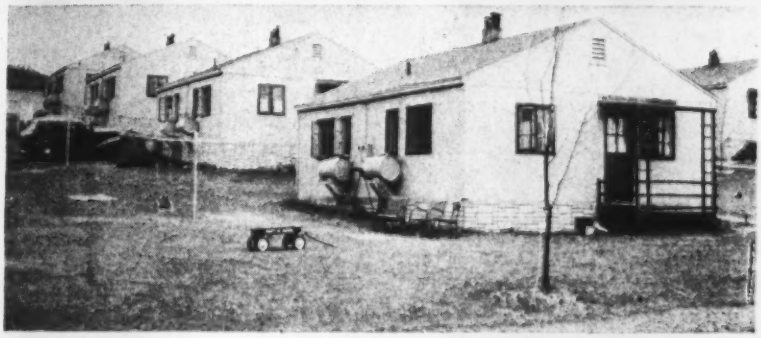
Conversion by the Federal Works Agency of a General Electric Co. war plant in East Syracuse, N. Y., into classroom and laboratory facilities for ex-GI students at Syracuse University, was approved Sept. 17, by Maj. Gen. Philip B. Fleming, Federal Works Administrator.

An enrollment of 13,000 students, of whom 10,000 will be veterans pursuing higher education under the GI Bill of Rights, is anticipated when the facilities are available. The present student register of 11,000 includes about 6,100 veterans.

The building, known as the Thompson Road plant, is served by buses to the university's main campus in a 13-minute ride. Alterations, including equipment, will provide 50 general classrooms, 18 engineering and science laboratories, 75 shops, ten offices and a cafeteria to seat 500. The plant has been listed as surplus government-owned property and the university is negotiating with the War Assets Administration for the transfer of the land and buildings.

The government is helping many other educational institutions in a similar manner, as shown on the next page.





Barracks go to school to ease house shortage

Thanks to the "GI Bill of Rights" and the desire of war veterans to continue or complete their education, U. S. colleges, universities and technical institutions this fall have found themselves faced with an entirely new problem—that of finding accommodations for an influx of students far beyond anything foreseen when the schools were established.

In addition to finding adequate classroom space—a problem that has been partially solved by taking over now empty industrial plants, and utilizing space such as chapels that were formerly only occasionally used—the schools have found that the influx of veterans has added the very serious problem of housing to their other troubles.

In a time of shortage, one major source of housing is open to the schools, and they have made haste to avail themselves of it. This source is the Federal Works Agency which through its Bureau of Community Facilities is obtaining for the schools entire barracks or surplus materials from Army installations and government-owned war plants, and is transporting these structures to the campus for re-erection and use by married students.

Many types Used

The accompanying column of photographs shows some of the many types of housing now being used. Starting at the top are installations at Rensselaer Polytechnic Institute, Troy, N. Y.; the University of Vermont, Burlington; Syracuse University, Syracuse, N. Y.; Dartmouth College, Hanover, N. H., and the University of Florida at Gainesville. Additional types, including trailer villages, are not shown.

The Bureau of Community Facilities, under the commissionership of George H. Field, is operating under a congressional grant of $75,000,000 appropriated for the purpose of obtaining good housing to aid the schools.

Most of the housing erected is frankly of a temporary nature, designed only to meet a situation which was proving disastrous to many veterans who found themselves unable to continue their education, despite the generous provisions of the G. I. bill, because they were unable to find accommodations for their families while they themselves attended classes. Most of the installations were made possible by cutting the former barracks into sections and re-assembling them at the new site. In some cases the structures were completely dismantled and the lumber and other materials re-assembled to make more attractive and convenient quarters.

MEN AND JOBS

Col. John E. Buxton, for the last several months assigned as camp commander at Camp Barkley, Tex., will return to Little Rock, Ark., and resume private engineering practice. A member of the Arkansas National Guard, he entered service with that organization in 1941, later going to Fort Sill to organize and command the 818th Tank Destroyer Battalion. He then was transferred to the repairs and utilities section of the Army Engineers.

Raymond Mills, a planner in the Milwaukee County Regional Planning Commission since January, 1945, has resigned to accept a position as engineer and architect with the city planning commission of Guam.

V. G. Horton, engineer in the California division of water resources, has been named construction superintendent in charge of the division's flood control maintenance headquarters at Sutter City. He succeeds **James M. Beery** who recently resigned.

Warfield R. Wood, has been promoted to chief engineer in the re-organization and expansion of Howe & Wise Consulting Engineers, a 50-year old firm at Houston, Tex.

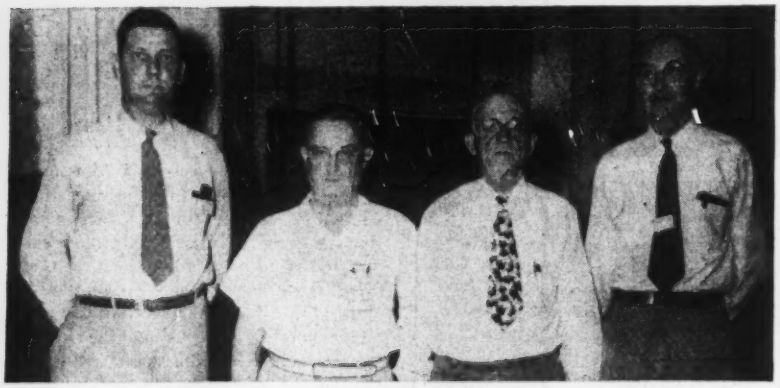
John F. Ripken, formerly a hydraulic engineer with the David Taylor Model Basin, is now an assistant professor of civil engineering at the University of Minnesota's St. Anthony Falls Hydraulics Laboratory.

Henry M. Morris, Jr., is now an instructor in civil engineering at the University of Minnesota, where he is also taking graduate work. He previously taught in the civil engineering department at Rice Institute.

The following men hold teaching assistantships in the civil engineering department of the University of Minnesota: **Jack E. Roselund,** a graduate of Southern Methodist University, **Jack W. Cormack,** and **Louis Osipov.**

Allen B. Benzick, a 1946 civil engineering graduate of the University of Minnesota, is now office engineer for the Portland Cement Association in Minneapolis, Minn.

Michigan Highway Commissioner Charles M. Ziegler (right) and Richard Allen, department inspector, look over bituminous material being placed on U. S. 16 between East Lansing and Williamston—part of extensive pavement repair programs now under way in the state.



New and old officers of the Southeastern Section, American Waterworks Association, are, left to right: W. T. Linton, Columbia, S. C., secretary; B. P. Rice, Atlanta, Ga., retiring secretary; W. W. Pointer, Troy, Ala., retiring chairman, and W. H. Weaver, DeKalb, Ga., new chairman of the group.

Shuji Magota is now employed by Bannister Engineering Co. He is a graduate in civil engineering in the class of 1946 at the University of Minnesota.

John Swenson who served with a malarial control unit on Saipan, is back with Toltz King and Day, Inc., engineers and architects, of St. Paul, Minn.

Russell L. Culp, associated the last five years with Black & Veatch, consulting engineers of Kansas City, Mo., has been employed as city engineer at Garnett, Kan. He replaced **Ralph Roderick,** who resumed his position as city engineer at Garnett, a year ago, after serving four years in the Army and has now joined a consulting engineering firm at Corvallis, Ore.

Archie J. Doolittle has been appointed assistant executive manager in charge of production by Eggers & Higgins, architects, of 542 Fifth Ave., New York City, with whom he has been associated since 1938. A graduate in civil engineering of the North Carolina State College, Mr. Doolittle entered the engineering field with his father soon after completing extension studies at Columbia University. He has been actively engaged in the profession since 1915.

Mr. Doolittle

Paul S. Fox is the new associate chief of field party and sanitary engineer for Uruguay under the Health and Sanitation Division of the Institute of Inter-American Affairs. Mr. Fox is a civil engineering graduate of the University of Kansas and took a degree in sanitary engineering from Harvard University. He served with the Kansas State Health Department for two years and with the New Mexico State Health Department for 19 years, before joining the Army Sanitary Corps in 1942. He later served with the United States Group Control Council Public Health section in France and Germany. Mr. Fox recently was released from active service with the rank of lieutenant colonel.

F. M. McKenna, Pocatello, Ida., has been named telegraph and telephone engineer for the Eastern district of the Union Pacific R.R. Co. with headquarters at Omaha, Neb. He replaces **John Hilbert** of Denver, who retired

Oct. 1st. Mr. McKenna has been supervisor of lines from Salt Lake City to McCammon, Ida.

Col. Walter W. Hodge has been appointed executive officer to the division engineer of the South Atlantic Division in Atlanta, Ga. Colonel Hodge was graduated from West Point in 1925. He attended Cornell University after serving with the 2nd Engineers in topographic mapping along the Mexican border. Later he attended the Engineer School at Ft. Belvoir. In 1930 he was attached to the Alaska Road Commission, serving two years. In 1942 he was with the 18th Engineers on the Alcan Highway and later was in command of the 93rd Engineers, stationed at Fort Randall, Alaska. From 1943 until July, 1944, he was post commander. He has served as base engineer at Manila.

Col. Hodge

Winfred W. Baker, formerly engineer for the Bureau of Reclamation at Tucumcari, N. M., is now supervisor of the Bureau's preconstruction activities in South Dakota. He will be concerned with the Missouri Basin development program.

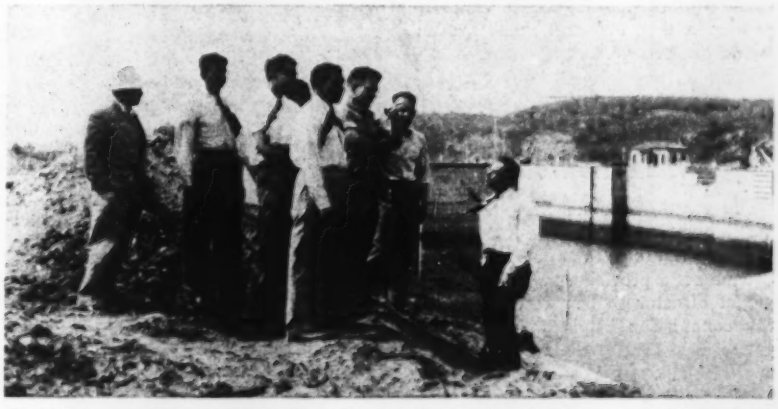
Maj. B. G. Seitz, 1930 graduate of Rensselaer Polytechnic Institute, has returned to the Syracuse, N. Y., district of the U. S. Engineers, having been relieved from active duty after three and a half years. His last assignment was in the grade of major, Corps of Engineers, as control officer, Manhattan District, Oak Ridge, Tenn. At Syracuse he is in charge of hydraulic and hydrologic design sections on flood control work.

R. Gail Baker, graduate of the University of Arizona and an authority on water engineering, recently was appointed city engineer at Phoenix, Ariz. He is also street superintendent. A former city engineer of Phoenix, Baker is a member of the municipal water commission and also is a consultant for the Arizona State Land Commission working on the Colorado River project. He is a former Salt River Valley Water Users Association engineer and worked on all of the Salt River dams except the Roosevelt Dam. **J. Lee Chambers** of the city engineering staff has been acting city engineer for the last several months and will now resume his former position.

Robert R. Herwig has left the position of city engineer of Peoria, Ill., to enter the consulting engineering firm of Leiter and Associates, 115 No. Jefferson St., Peoria. Herwig, a graduate from the college of engineering, University of Illinois, worked for one and a half years after graduation in the Peoria U.S.E.D. office. He later served Peoria as assistant city engineer for eleven years. Other members in the firm, formed Oct. 1, are **Kenneth Leitar** and **Charles E. Carter.**

Ernest W. Steel, formerly chief of field party in Venezuela, has resigned from the Institute of Inter-American Affairs to take a position with the Venezuelan government as consulting engineer for the National Institute of Sanitary Works. **William W. Crowe, Jr.,** has been designated acting chief of the field party now at work in the South American country.

Mutual interest in surveying and mapping brings together R. Getty Browning (left) location engineer for the North Carolina State Highway Commission; J. E. Meyer, Washington, D. C., and E. J. Wakefield, of the Public Roads Administration whose headquarters are also at Washington.



Looking over projects being built and maintained under jurisdiction of the St. Paul district, Corps of Engineers, are a group of engineering students from foreign lands, now on tour of the United States. Scene above is at Hastings, Minn., flood control dam.

Discussing highway problems at a recent meeting are the chief engineers of three western highway departments. Left to right, they are: R. H. Baldock, of Oregon; G. T. McCoy of California, and D. G. Greer, of Texas.

Out-of-town refuse dumps banned in Ontario

Ending a long legal dispute, the Supreme Court of Ontario, Canada, last week ordered the town of Barrie to cease its use for garbage dumping and land-fill of a site in the adjoining township of Vespra. The decision was the first handed down by this court in matters pertaining to garbage disposal.

Barrie has long utilized a site just over its own boundary in Vespra, and Vespra authorities, declaring the dump to be a nuisance, passed an ordinance prohibiting the dumping of garbage anywhere in the township if the garbage originates outside those boundaries. The ordinance was based on provisions of the provincial Public Health Act, and approved by the Ontario Department of Health.

Of correspondingly serious import to many municipalities, including Ottawa, Welland and Coburg are recent amendments to the Ontario Municipal Act, which prohibit municipalities from acquiring land in adjacent areas for disposing of garbage.

N. C. road body opposes road fund diversion

The North Carolina State Highway and Public Commission will ask the new state legislature to take out of the state revenue act a provision that permits the budget director to transfer from highway commission funds a sum equivalent to 3 percent of the 6-cent gasoline tax, if the money is needed for other state activities.

With budget requests for the 1947-49 biennium expected to pass all records, the commission said recently at Raleigh that the legislature should be asked to delete the clause and save the highway money from "raids."

The commission also agreed that eventually a constitutional amendment should be passed to hold all highway revenue solely and permanently for highway work.

Top earth-moving marks at Anderson Ranch Dam

During September, 422,500 cu.yd. of material went into the Bureau of Reclamation's Anderson Ranch Dam in Idaho, exceeding the previous recorded high figure of 411,700 established in August, according to Construction Engineer Donald S. Walter.

On one day—Sept. 18—with men and equipment working at top speed, 20,680 cu.yd. of material were added to the embankment of the dam by the Morrison-Shea-Twaits-Winston Co., contractors. The two millionth cubic yard to go into the structure this year also was placed in September, bringing the total embankment to approximately 8,500,000 cu.yd. When completed, the dam will contain 9,053,300 cu.yd.

Included in the September record total were 378,000 cu.yd. of earth, much of it brought a distance of two miles by a conveyor belt, 39,500 cu.yd. of rock, and 5,000 cu.yd. of riprap.

Anderson Ranch Dam when completed will be the highest earth-fill dam in the world and will store 500,000 ac.ft. of water to supplement existing supplies in the Boise Valley. Power facilities at the dam will have an installed capacity of 41,500 kilowatts it is contemplated.

The dam also will provide flood and silt control.

PERSPECTIVE . . . .

Building Code Clarification

A concrete step toward cutting through the red tape and tradition that obstruct building today was taken recently by the Building Officials Conference of America, when it approved the formation of a foundation to promote a model national building code (*ENR* Oct. 10, vol. p. 469).

This is a major move toward the objective of permitting use of new materials and new methods of construction as soon as they prove worthy—without the endless complications now imposed on manufacturers and builders by the varying requirements and interpretations of local building codes.

The new organization, to be known as the Building Officials Foundation, will be a national, nonprofit agency, and it represents the consummation of some 30 years of discussion within the parent conference. Already established in temporary headquarters in New York City, the foundation is to be financed by a $600,000 endowment, plus membership fees.

Its objectives include: Providing and encouraging the adoption of a nation-wide uniform code now in preparation, which will bring local codes up to date and provide them with the flexibility necesary to accommodate new materials and new ideas; to establish a uniform testing procedure to evaluate equipment and materials, publishing the results of its tests in such a form that they will be of great value to the industry and to administrative officials. As services, the foundation will provide a structural bureau to assist understaffed municipalities in analyzing plans and projects of unusual magnitude or design, and publish a monthly bulletin for the use of all concerned.

The basic code, now being assembled by a special committee, will be fundamentally a performance code, prescribing standards of construction to meet functional requirements of structures in terms of their intended use. Conference officials insist that such functional requirements are constant, being determined by engineering principles governing structural integrity, sanitation, etc.

This code is to be supplemented by a specification manual, to be issued in loose-leaf form, providing details and uses of methods, materials and equipment.

Additionally, a "Small Municipality Building Code", designed for communities of less than 10,000 population, will be issued. It will be written in non-technical language so as to be readily applicable. All three of these items will be re-issued each year, in a printing that will incorporate all new amendments.

The testing procedure will utilize existing laboratories, and products approved as meeting requirements of the codes will be entitled to use of a label of approval.

Ordinary membership in the new foundation is open to any building or housing official by virtues of his office charged with protection of life, safeguarding of property or conservation of public health. No dues or fees will be charged for services explicitly designed to aid such officials. Conference membership is open to such public officials as are actively engaged in the administration of building regulations for membership dues of $10 per year. Manufacturers and others who subscribe to the voluntary endowment of the foundation may become founder members, and similarly institutions engaged in the building industry are eligible for participating membership. Send inquiries to the Foundation, 18 East 42nd St., New York.

Sixty new airfields for N. Y., N. J. and Conn.

The Regional Plan Association announced Oct. 7, that a metropolitan airport plan for doubling the number of airports in the New York region, including an eventual fourth major airport for airline transport in the New Jersey meadows north of the Lincoln Tunnel, more than 60 additional fields in the suburban belt and a single agency to administer a regional airport system, had been completed.

Announcing conclusion of the work of the Regional Airport Conference, organized two years ago at the request of the CAA, Paul Windels, president of the association, said it would ask the governors-elect of New York, New Jersey and Connecticut to consider the selection or creation of an interstate agency to operate a unified regional airport system.

The association said details of the first half of the conference report, dealing with major and supplementary major airports, would soon be available. The second report, to be released next month, will identify the proposed location of more than 50 new fields for other than scheduled transport flying.

Regional airport office at Boston

The opening of an office in the Customs House in Boston, Mass., for regional administration of the federal airport program has been announced by T. P. Wright, Civil Aeronautics Administrator in Washington. The Boston office will serve District 1, including Maine, New Hampshire and Vermont, and District 2, including Massachusetts, Connecticut and Rhode Island. It will be located at the Customs House and will be the headquarters of the district airport engineers.

All of the 44 district offices in the United States are opening in anticipation of a flood of project requests for aid under the federal program. Project requests from states and communities are now being accepted.

Pennsylvania program

More than $50,000,000 will be spent on airport building programs in Pennsylvania in the next few years, the Pennsylvania Aeronautical Commission predicted in a recent report.

The commission, which regulates the 242 private and commercial airports now operating in the state, noted that bond issues totalling $15,000,000 in Philadelphia and $10,000,000 in Pittsburgh have been voted for transforming present facilities of the state's two leading cities into international airports.

Contract awarded for $3,750,000 gas pipeline

Southern California and Southern Counties Gas Co. has awarded a $3,750,000 contract for installation of California's section of the Texas-California natural gas line to H. C. Price, Co., of California.

Under terms of the contract, 214 miles of 30-in. high pressure natural gas transmission line will be installed between Blythe and Santa Fe Springs to become "the largest high pressure pipeline of its kind in the history of the natural gas industry."

Price said preliminary work will start at once and actual construction by the first of the year. The El Paso Natural Gas Co., which will build and operate the rest of the line, already has construction under way.

Caracas water contract cancellation explained

In its Oct. 10 issue (vol. p. 483) *Engineering News-Record*, referring to the construction of the Caracas, Venezuela, water supply project, said that the firm of Parsons, Brinckerhoff, Hogan and Macdonald was "relieved of most of its supervisory work a few months ago," and that a formal cancellation of the contract is now being negotiated.

Contacted in New York, the consulting engineering firm said that the contract in question was between its affiliate, Consulting Engineers, C. A., and Venezuela's National Institute of Sanitary Works.

"On June 19th," the engineering firm said, "the two parties agreed, of mutual and friendly accord, on the basis of cancellation of this contract. The institute recognized that Consulting Engineers had complied with its contractual obligations. Since then, Consulting Engineers has carried out completely the transferral of the supervisory work to the institute, and the formal cancellation will be effected when the institute fulfills its agreed-upon payment obligations."

New blasting powder under study in the West

An explosion last month which killed two persons and destroyed a building at the Permanente Magnesium plant near San Jose, Calif., which is owned by Henry Kaiser, brought to light the fact that the west coast industrialist has plans for perfecting a new-type blasting powder.

Officials of the company refused to reveal details except that the powder has a magnesium dust base, that they have been using it successfully for several months in their limestone quarry in connection with cement plant operations and that it will be more economical to use than existing powders.

At a coroner's inquest, held to determine the cause of the accident, Kaiser spokesmen revealed that the explosive was insensitive to shock and jar and that they plan to provide it with greater safety characteristics than existing ones.

Contractors forfeit bond on Hawaii tunnel job

D. & M. Contractors, Ltd., have had to forfeit their bid bond on a $441,000 Hawaii tunnel project because they did not furnish the required 50 per cent performance bond (*ENR* Sept. 12, vol. p. 340).

They said that "strikes and threats of strikes make it impossible for any organization here, now, to guarantee the completion of any undertaking such as this job for a predetermined amount of money."

The Honolulu city supervisors will now call for new bids on the contract to develop additional water by drilling a two-mile tunnel into the mountains at Waianae, Oahu.

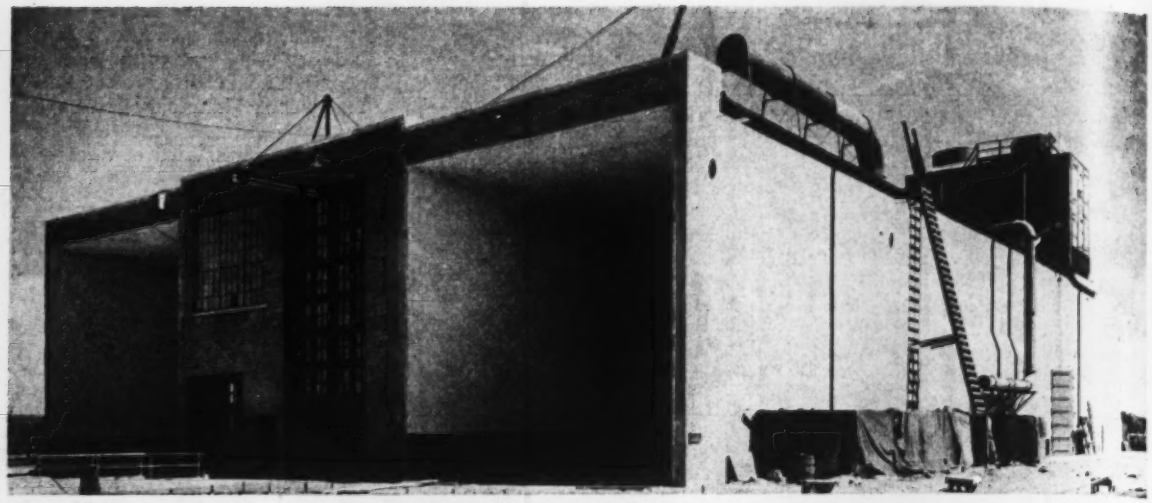
Legal studies are being made as to the amount of the bid bond to be forfeited, but it is expected to be between $10,000 and $12,000.

Revised plan submitted for Jacksonville highway

A plan for revising the original route for a proposed inter-regional highway through Jacksonville, Fla. (*ENR* Aug. 8, vol. p. 151) has been submitted to members of the state road department in Tallahassee by representatives of the Jacksonville Chamber of Commerce highway committee.

The recommendations, which include a toll-financed express parkway system with two bridges across the St. Johns River, will be studied by the highway department and its engineers. The finished system of through streets would cost approximately $30,000,000 and would be financed partly by tolls on the two new proposed bridges.

The highway committee recommended a toll of 10 cents per vehicle with an annual $10 tag available for Jacksonville drivers. This would make a bond issue unnecessary.



***For Propeller Testing**—Walls 35 ft. high, built monolithically to prevent carbon monoxide gas escape through joints, and concrete roof, 22 to 36 in. thick, are structural features of this propeller test house built by Turner Construction Co. at East Hartford, Conn. for Hamilton Standard Propellers, division of United Aircraft Corp. Two separate test cells have a 33-ft. square air intake through a sound-proofing chamber to an adjustable cone-type orifice. Each orifice control apparatus weighs 40 tons, can be moved longitudinally 26 ft., and the diameter of the orifice can be varied from 15 to 30 ft. Concrete was placed in winter, inside forms made up in full 35-ft. height panels, 12 ft. wide, with live steam released under a tarpaulin cover to prevent freezing.*

Large expenditure needed on Northwest highways

Next year Washington State Highway Department revenues will fall short by nearly $7,000,000 of the amount needed to maintain, modernize and expand the highway system adequately, said Clarence B. Shain, director of highways, in addressing the recent convention of the Washington State Good Roads Assn.

Shain told the convention that $149,000,000 worth of "necessary and critical construction" should be accomplished to bring the present system of roads, as designated by the legislature, up to the standards necessary to handle present-day traffic, while additional projects aggregating $80,000,000 are "necessary and desirable."

Present financing prospects indicate it will be almost 10 years before reconstruction of the Pacific Highway south of Olympia can be completed, even though "there is no possible chance that any segments of this highway will be able to bear the steadily increasing traffic" during that period, Shain said.

Among proposals rejected by the association were a $150,000,000 bond issue and an increase of one cent in state gasoline taxes. It tabled a committee recommendation that the "pay-as-you-go" policy of paying for highway improvements be reaffirmed after delegates argued that it failed to provide a solution to the revenue problem.

Davis diversion channel reported half completed

Half of the excavation necessary for the diversion channel of the Bureau of Reclamation's Davis Dam on the Colorado River has been completed during the first six months of operation, according to H. F. Bahmeier, director of the project for the bureau.

The expected employment peak of 1,500 workmen has been reached with a total payroll for the project running more than $90,000 a week. The main contractor, the Utah Construction Co., is employing between 1,200 and 1,250, and the government and other contractors on the project are employing from 250 to 300 workmen.

Working three shifts a day, the fleet of 40 huge dump trucks has hauled an average of more than 11,000 cubic yards of earth and rock a day. The 4,500-foot diversion channel will require 3,250,000 cubic yards of excavation and the contractor has now removed more than 1,700,000 cubic yards.

During construction of Davis Dam this large open ditch will carry the water of the Colorado River around the Arizona abutment of the dam. When the dam is completed the channel will become a permanent feature of the project since the spillway, power plant, forebay and intake structure, and the power plant itself will be located at its downstream end.

Reclamation engineer to help Venezuela

Albert W. Newcomer, engineer in the branch of design and construction at the Denver, Colo., office of the Bureau of Reclamation, has gone to Venezuela where he will investigate suitable locations for reservoirs and other construction for irrigation, flood control, and hydroelectric power.

Commissioner of Reclamation Michael W. Straus designated Mr. Newcomer for the assignment, following a formal request by the Venezuelan government to the Department of State. Mr. Newcomer will serve as consultant to the government, and will be assisted by a staff of Venezuelan engineers assigned for that purpose.

The major part of the investigations will be in an area in the northern part of the country, east and west of Lake Maracaibo. Mountain streams will be utilized to provide water and, at the same time, will be harnessed to prevent recurrent floods. The valley of the Orinoco also will be studied for possible irrigation developments.

Mr. Newcomer has been with the Bureau of Reclamation for 12 years. He is a graduate of the University of New Mexico in civil engineering and speaks Spanish. His recent work with the Bureau has been conducting investigations and preparing designs for irrigation and drainage systems.

OBITUARY

John T. Hewitt, 45, Youngstown, Ohio, engineer, died Oct. 8. He was former regional district deputy director of Mahoning County highways, and while serving in the legislature, (1935-1938), he helped recodify park, sanitary, and canal district laws of Ohio. During that time he also operated the Penn-Ohio Equipment and Supply Co., Youngstown. He was a graduate of Columbia University.

Fred C. Garvin, 63, Atlanta, Ga., contractor, died recently. He went to Atlanta from Texas and was in the contracting business for about 25 years.

Orrin Bert Powell, 56, construction engineer with the Girvin and White Construction Co. of Jacksonville, Fla., died Oct 12.

Lt. Col. Harold B. Stuart, 57, civil engineer, Hamilton, Ont., died in Ottawa Oct. 14.

Otis F. Pray, 58, Revere, Mass., assistant superintendent of the Revere public works department for the last 10 years, died Oct. 9. He served in Naval aviation during World War I.

Joel M. Lowman, 67, retired chief engineer for the city water department at Seattle, Wash., died Oct. 14. He retired from the department last November after having worked there since 1921—as its chief engineer since 1932. He had lived in Seattle 44 years, working for the city engineer before transferring to the water department.

Andrew McCrindle, 65, of the McCrindle Contractors Ltd., Winnipeg, Man., died Oct. 10 at St. Paul, Minn. A native of Scotland, he went to Winnepeg in 1902 and helped construct most of the larger buildings there.

Frederick Wynn Minson, 77, a retired construction engineer who had been field office manager for Sturm & Dillard Co. of Columbus, Ohio, died in Richmond, Va., Oct. 14.

Robert H. Allan, Shelton, Wash., building contractor, died Sept. 30. He worked with the U. S. Army Engineers during World War II.

Frederick W. Edmonson, 70, organizer and former president of Ferguson & Edmondson Co., engineers and constructors of Pittsburgh, Pa., died in Bronxville, N. Y., Oct. 3.

Elzey G. Burkham, 57, former civil engineer, and former member of the civil engineering firms of Moreno, Brooks and Burkham, and Brooks and Burkham, St. Louis, Mo., died Oct. 12.

Elwood M. Wilgus, 55, superintendent of the Toledo, Ohio, water intake pumping station, and a construction engineer, died Oct. 10. He served as division engineer in the construction of the city's lake water system.

Ferdinand Wenz, 96, died Oct. 7. He was with the Wood County, Ohio, engineer's office, serving for two terms as Wood County surveyor. He retired 25 years ago.

Calendar of Meetings

NATIONAL

National Council of State Boards of Engineering Examiners, 25th annual meeting, Hotel Statler, St. Louis, Mo., Oct. 27-29.

American Institute of Steel Construction, annual convention, Del Coronado Hotel, Coronado, Calif., Oct. 28-31.

American Public Health Association, 74th annual meeting, Cleveland, Ohio, Nov. 11-15.

American Welding Society, annual meeting in conjunction with the National Metal Congress and Exposition, The Ambassador, Atlantic City, N. J., Nov. 17-22.

Highway Research Board, 26th annual meeting, National Research Auditorium, Washington, D. C., Dec. 5-8.

National Society of Professional Engineers, annual meeting, Atlanta-Biltmore Hotel, Atlanta, Ga., Dec. 7.

American Association of State Highway Officials, annual meeting, Biltmore Hotel, Los Angeles, Calif., Dec. 17-20.

REGIONAL

American Water Works Association, Kentucky-Tennessee Section, Andrew Johnson Hotel, Knoxville, Tenn., Oct. 28-30.

American Water Works Association, Iowa Section, first reorganization meeting, Hotel Kirkwood, Des Moines, Iowa, Nov. 4-6.

American Water Works Association, New Jersey Section, Chelsea Hotel, Atlantic City, N. J., Nov. 7-19.

The Associated General Contractors of America, Inc., Carolinas Branch 26th annual convention, Sheraton Bon Air Hotel, Augusta, Ga., Nov. 10-12.

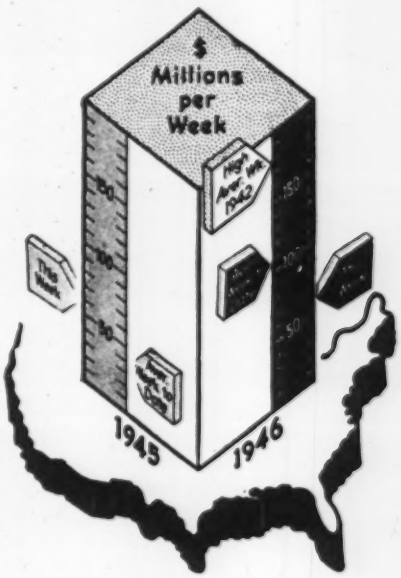
Southeastern Association of State Highway Officials, annual meeting, Tutwiler Hotel, Birmingham, Ala., Nov. 12-13.

American Water Works Association, Virginia Section, John Marshall Hotel, Richmond, Va., Nov. 14-15.

American Water Works Association, Wisconsin Section, Northland Hotel, Green Bay, Wis., Nov. 15-17.

American Water Works Association, North Carolina Section, Hotel Caroline, Raleigh, N. C., Nov. 18-20.

CONSTRUCTION ACTIVITY



As Reported this week to... *Engineering News-Record*

CONTRACT VOLUME

Continental U. S. Only
(Thousands of Dollars)

	Week of Oct. 24 1946	Cumulative 1946 (43 wks.)	Cumulative 1945 (43 wks.)
Federal	$1,242	$554,563	$694,467
State & Mun.	24,090	1,206,124	301,276
Total Public.	$25,332	$1,760,687	$995,743
Total Private	29,871	2,701,546	739,947
U. S. Total.	**$55,203**	**$4,462,233**	**$1,735,690**

WHERE CONSTRUCTION ACTIVITY ORIGINATED THIS WEEK

Dollar Volume (Thousands)

Type of Work	This Week	Cumulative 1946 (43 wks.)	Cumulative 1945 (43 wks.)
Waterworks	$821	$93,906	$45,335
Sewerage	1,210	93,751	28,333
Bridges	2,239	111,157	33,603
Highways	17,224	662,887	187,009
Earthwork, Waterways	455	316,391	45,223
Buildings, Public	2,538	340,089	428,073
Industrial	14,520	906,015	437,649
Commercial	14,582	1,621,444	205,062
Unclassified	1,614	316,593	324,744

NOTE: Minimum size projects included are: Waterworks and waterway projects, $22,500; other public works, $40,000; industrial buildings, $56,000; other buildings, $205,000.

NEW PRODUCTIVE CAPITAL

	Cumulative 1946 (43 wks.)	Cumulative 1945 (43 wks.)
NON FEDERAL	$1,263,808	$664,601
Corporate Securities	357,747	169,996
State and Municipal	681,061	331,005
RFC Loans	.....	24,600
REA Loans	.....	60,000
Fed. Aid Highway	225,000	79,000
FEDERAL	1,672,982	1,049,898
Total Capital	**$2,936,790**	**$1,714,499**

ENR INDEX NUMBERS

Index Base = 100		1913	1926
Construction Cost	Oct. '46	360.94	173.50
Building Cost	Oct. '46	272.74	147.43
Volume	Sept. '46	223	98

CONSTRUCTION REPORTS

Bids Asked — Low Bidders — Contracts Awarded

(Daily service also available—Write for details)

Compiled by Business News Department—Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

ELSIE EAVES, Manager *J. A. MAHONEY, Reports* *J. V. McEWEN, M. R. ROESSLER, Statistics*

WATER SUPPLY

Construction Reports received since this section went to press will be found in Last Minute Construction Reports.

BIDS ASKED

Bids Asked October 28

Conn., Hartford—Metropolitan Dist., Water Bureau, Bd. Contr. & Supply, 650 Main St., installing 3,000 ft. pipe connections, appurtenances in 110 locations in Hartford and adjoining towns, Contr. 111. Plans deposit $5.

Bids Asked October 31

Wash., Seattle—City, County-City Bldg., 3 and James Sts., Zone 4, 9,700 ft. 30 and 42 in. electrically welded steel or rein.-con. and 720 ft. 20 in. c. i. watermains in W. 80 St. $250,000. C. L. Wartelle, city engr.

Bids Asked November 1

Wash., Eatonville—Town, Town Hall, 300,000 gal. concrete reservoir, 350 g.p.m. concrete water filter and pump, 1,770 ft. water pipeline and 1,320 ft. concrete sewer drain line. $85,000. Plans deposit $15. J. W. Carey & Assoc., 1917 1 Ave., Seattle, Zone 1, engrs. CD 11/8/45—ENR 11/29/45.

Bids Asked November 5

N. C., Lexington—Lexington Utilities Comn., F. H. Smith, city mgr., Lexington, city's water purification plant, addn., imprvs. Plans deposit $20. W. C. Olsen, 5 Exchange Pl., Raleigh, consult. engr. CD 2/27—ENR 3/21.

Bids Asked November 6

Ore., Portland—City, City Hall, 500,000 gal. elevated steel water tank in Sellwood Park. $100,000. B. S. Morrow, city engr.

Bids Asked November 12

Ill., Spring Valley—City, municipal water treatment plant, appurtenant work. Plans deposit $10. Miller Eng. Service, 322½ E. Main St., Streator, engrs. CD 3/17—ENR 4/6.

†**Washington**—Bureau Reclamation, Coulee Dam, drilling water supply well, Columbia Basin Proj., Spec. 1499 Walker R. Young, ch. engr.

Bids Asked December 16

W. Va., Hollidays Cove—City, in office City Clerk, 125 Cove Rd., Contr. 1, intake pier and pump. station; Contr. 2, c.i. watermains; Contr. 3, 6 m.g. distr. reservoir; Contr. 4, water treatment plant. Plans deposit $10. Alfred LeFeber, 713 Temple Bar Bldg., Cincinnati, Zone 2, O., consult engr.; adv. ENR 10/24. CD 9/24—ENR 9/26.

LOW BIDDERS

N. Y., New York—Comr. Water Supply Gas & Electricity, Municipality Bldg., Zone 7, Oct. 4, furnishing, del., laying steel and c.i. watermains, appurtenances in Rockaway Blvd., Queens Boro, from Tufano Contg. Corp., 168-22 91 Ave., Jamaica. **$737,458.** CD 9/27.

Okla., Medford—City, rejected bids Sept. 27, 500,000 gal. concrete reservoir, well, pump house and pump equip. L. B. **$36,600.** CD 9/4.

Tex., Colorado City—City, Oct. 9, c. i. pipe for sewerage sys. imprvs., from U. S. Cast Iron Pipe & Foundry Co., Praetorian Bldg., Dallas. **$28,667.** CD 9/20—ENR 9/26.

Tex., Galena Park—City, Oct. 9, water supply sys. extens., imprvs., from Henderson Bros., 7051 Chocolate Bayou Rd., Houston, **$93,824.** Est. $70,000. CD 9/23—ENR 9/26.

Tex., Omaha—City, R. Horn, mayor, Oct. 10, 3.2 mi. watermains, rehabilitation pump. plant, electric tank, etc., from Dayton Bros., Valley Mills. **$47,595.** Est. $36,000. CD 9/25—ENR 10/3.

Wash., Tacoma—City, City Hall, Oct. 15, watermains in Local Imprvt. Dist. 5147, from Valley Constr. Co., 7708 Rainier Ave., Seattle. **$194,026;** Dist. 5166, from E. Anderson, Puget Sound Bank Bldg., Tacoma, **$23,207.** R. Bantz, city engr.

CONTRACTS AWARDED

Mich., South Haven—City, R. Tait, city clk., water filtration plant exten., to Getman Brothers, South Haven. **$101,491** incl. equip. Bids 9/27. CD 9/16—ENR 9/19.

Minn., Walnut Grove—Village, A. W. Olson, clk., furnishing, installing 16,450 lin. ft. of 4 and 6 in. c. i. pipe, installing 2,010 lin. ft. of 4 and 6 in. c. i. pipe, to Barbarossa & Son, St. Cloud. **$43,814.** Bids 10/7. CD 9/24—ENR 9/26.

O., Port Clinton—Bd. P. Affairs, electrification WW. to replace steam pumps, to E. R. Garlock & Assoc., Delaware Bldg., Akron. **$50,377.** CD 5/14/45—ENR 5/17/45.

Tex., Hillsboro—City, c/o A. M. James, 8 in. c.i. waterlines, force account. **$30,000.**

Wash., Bellevue—Water Dist. 68, 190,000 ft. 2- to 12-in. water sys., to Argentieri & Colarossi, 1819 Weller St., Seattle. **$340,278.** Bids 9/27. CD 10/2—ENR 10/10, under LB.

Ont., Brigden—Village, D. P. Shaw, clk., domestic water and fire protection sys., consisting rein.-con. reservoir, concrete, brick pump house, watermains, hydrants, valves, fittings, etc., to Shaw Constr. Co. Ltd., 530 Vidal St., S. About **$35,000.** CD 9/13—ENR 9/19.

SEWERS, WASTE DISPOSAL

Construction Reports received since this section went to press will be found in Last Minute Construction Reports.

BIDS ASKED

Bids Asked October 29

Mass, Boston—Commonwealth of Mass., 100 Nashua St., installing drainage sys., in Sandwich. Plans deposit $10.

N. Y., New York—President Bronx Boro, Bronx County Bldg., 851 Grand Concourse, Zone 51, reconstructing temporary sewer Morris Park Ave.; combined sewer, appurtenances Miles Ave. between Swinton and Quincy Aves., Miles Ave. between Balcom and Huntington Aves.; sewer, appurtenances Brinsmade Ave., etc.

Ont., Toronto—Chairman Bd. Control, Toronto, two 2 m.g. unchokable sewage pumps, motors, appurtenances at South St. Sewage Pump. Station, for Municipality, R. H. Saunders, mayor.

Bids Asked October 30

La., New Orleans—Sewerage & Water Bd., 526 Carondelet St., rein.-con. drainage canal, pipelines, etc. CD 7/13—ENR 7/25.

Va., Norfolk—Hampton Roads Sanitation Dist. Comn., Flatiron Bldg., Norfolk, equipment for plain sedimentation sewage treatment plant (Lambert's Point Sewage Treatment Plant). $120,000. Plans deposit $10. Extended date. Aldrich & Buck, 122 E 18 St., New York, Zone 3, N. Y., engrs. and archts. CD 10/7—ENR 10/10, under Lamberts Point.

Va., Norfolk—Hampton Roads Sanitation Dist. Comn., Flatiron Bldg., equipment for plain sedimentation sewage treatment plant (Boat Harbor Sewage Treatment Plant) Newport News. $110,000. Plans deposit $10. Greeley & Hansen, 6 N. Michigan St., Chicago, Zone 1, Ill., engrs. and archts.

Bids Asked November 1

Va., Blacksburg—Business manager Virginia Polytechnic Institute, Blacksburg, sewage treatment works. $250,000. Plans deposit $25. Begg & McGaughey, c/o owners, engrs. CD 10/2—ENR 10/10.

Bids Asked November 6

Okla., Oklahoma City—City Clerk, 42,000 lin. ft. 15- to 72-in. precast concrete storm sewers in Brook Park area. $330,000. Plans deposit $25. J. S. Waldrep, Tradesmens Bldg., engr.

Bids Asked November 13

Va., Norfolk—Hampton Roads Sanitation Dist. Comn., 322 Flatiron Bldg., boat harbor sewage treatment plant. $765,000. Plans deposit $10. Extended date. Greeley & Hansen, 6 N. Michigan St., Chicago 4, Ill., engrs. and archts. CD 10/7—ENR 10/10, under Newport News.

Bids Asked October 22

Calif., San Diego—City, Civic Center Bldg., 9,734 ft. 6 and 8 in. sanitary sewers in La Mesa Colony. $42,100.

LOW BIDDERS

Ark., Van Buren—City, rejected bids Oct. 7, outfall line for sewerage sys., install. pump station, imprv. storage drainage sys. CD 9/26.

Ark., Van Buren—City, c/o J. McKinney, mayor, City Hall, rejected bids Oct. 7, outfall sewer line, pump station and imprv. storm water drainage sys. Approx. $62,000. CD 9/26.

Ill., Mundelein—G. T. Latham, treas., Fairview Dr. N., West Shore Park, (Mundelein P.O.) rejected bids Oct. 8, sanitary sewerage sys. West Shore Park. Project indefinitely postponed. CD 9/27—ENR 10/3.

Ky., Russellville—City, c/o City Clk., City Hall, rejected bids Oct. 8, sewage treatment plant. L. B. **$146,893.** CD 9/13—ENR 9/19.

Md. Baltimore—City, c/o Bd. Awards, City Hall, Oct. 10, oil burning equipment for sewage plant, from A. Dierks & Co., 159 West St., Brooklyn. **$107,300.** CD 10/8/46—ENR 10/10/46.

CONTRACTS AWARDED

Calif., Los Angeles—Los Angeles Co., Hall of Records, Oct. 15, 66,240 ft. 6- to 18-in. vitr. clay sanitary sewers, Norwalk Blvd. and other streets, vicinity of Whittier, to Burch & Bebek, 2802 Los Flores Blvd. **$238,176.** CD 9/23—ENR 9/26.

Conn., Stamford—City, Eng. Dept., Municipal Bldg., Stamford, storm sewers in Mokee Ave., Bedford, 5 and 6 Sts., to Paul Bacco & Son, 217 Bedford St., **$130,510.** L. Tuttle, Municipal Bldg. engr.

Conn., Stamford—City, Municipal Offices, storm sewers incl. sidewalk and curbing replacements on Betts Ave. and Willow St., to Paul Bacco & Son, 217 Bedford St., and Frank Palmer & Sons, Palmer Island, Stamford. **$48,276.** Leon Tuttle, Main and Atlantic Sts. engr.

Ill., Spring Valley—City, sanitary sewerage sys., etc., incl. Units 1, 2, 3 and 5, to Collignon Constr. Co., 910 Kahl Bldg., Davenport, Ia. **$75,854.** Miller Eng. Service, 322½ E. Main St., Streator, engrs. CD 2/17—ENR 4/6.

Ill., Urbana-Champaign—Urbana Champaign Sanitary Dist. of Champaign Co., c/o Bd. Trustees, Administration Bldg., east of Big Four Shops, Urbana, 10,883 ft. 12- to 30-in. intercepter sewer line, Sect. 2, from Coley Ave., Urbana to Columbia St. and Neil, and Sect. 3, 6,032 ft. 10- to 18-in. concrete or vitr. clay sewers South Urbana from Urbana to Water Sts. to Michigan and Race Sts., to R. V. Lloyd & Co., Russellville, Ark. **$129,000** and **$58,000** respectively. Bids 10/9. CD 9/12—ENR 9/19.

Okla., Oklahoma City—Selected Investment Corp., 1314 W. First St., sanitary sewer lines serving Carroll and Speece Addn., to Spicer Constr. C., 5801 N. Western Ave., **$46,620.** Est. $40,000. C. H. Guernsey & Co., Petroleum Bldg., engr.

PROJECTS COVERED

Projects—By Size

Construction projects here reported cover the United States and Canada, are of these minimum sizes or larger: water supply, earthwork, waterworks $22,500; other public works $40,000; industrial buildings $55,000; other buildings $205,000.

Classes of Construction

(Name in order of Listing)

Water Supply	Latin America
Sewers, Waste Disposal	Public Buildings
Bridges	Commercial Buildings
Streets & Roads	Industrial Buildings
Earthwork, Waterways	Unclassified

Stages Reported

PROPOSED WORK: Including appointment of engineers or architects.

BIDS ASKED (new announcements only). For full calendar, see also preceding issues of ENR.;

LOW BIDDERS: On jobs below $500,000 value all low bidder news will be the final reports published on the projects involved except where award is not made to the low bidder. In this case, a supplementary contract award report will be published.

CONTRACTS AWARDED: Except awards to low bidders previously reported in low bidder stage.

Dates shown are of issue in which last previous report was published.

Symbols and Abbreviations Include:

♦	Federal Government
★	Project of $1,000,000 or over.
ENR	Engineering News-Record
CD	Engineering News-Record Construction Daily

BRIDGES

Construction Reports received since this section went to press will be found in Last Minute Construction Reports.

BIDS ASKED

Bids Asked October 29

Kansas—State Hy. Dpt., Oswego, Bridge 5.5, continuous slab span, 30 ft.-10 @ 40 ft.-2 @ 30 ft.-30 ft., Proj. F137(3)-Pt. II, Labette Co.; Bridge 0.2, 30 ft.-10 @ 40 ft.-2 @ 30 ft.-1 ft., Proj. F73(5) Cherokee Co. R. C. Keeling, Topeka, engr.

Bids Asked October 30

Kansas—State Hy. Dpt., Emporia, Bridge 12, 2-14 ft. x 14 ft. x 61 ft. rein.-con., Proj. FI608(1); Bridge 2.9, 30 ft.-5 @ 38 ft.-30 ft. continuous rein.-con. slab span, Proj. FI 608 (1); Bridge 6.1, 3-12 ft. x 11 ft. x 14 ft., Proj. FI 608(1); Bridge 4.8, 30 ft.-38 ft.-30 ft. continuous rein.-con. slab span, Proj. FI608(1), all foregoing Lyon Co.; 50 ft.-70 ft.-50 ft. rein.-con. rigid frame bridge, Deer Creek, Proj. S FI(1), Shawnee Co. R. C. Keeling, Topeka, engr.

Bids Asked October 31

Kansas—State Hy. Dpt., Junction City, Bridge 7.9-2 units, 35 ft.-3 at @45 ft.-35 ft. slab span, Proj. UI-363(8); Bridge 7.4, 39 ft.-9 @ 54 ft.-30 ft., continuous rein.-con. girder spans, FRGM 363(9), both Geary Co. R. C. Keeling, Topeka, engr.

Bids Asked November 6

California—At office G. T. McCoy, state hy. engr., Sacramento, substructure for bridge across San Joaquin River at Mossdale (X-S.J.-5-B), San Joaquin Co.

Bids Asked November 7

California—At office G. T. McCoy, state hy. engr., 808 State Bldg., Los Angeles, rein.-con. slab bridge across Coachella Canal, 5 mi. east of Indio, (XI-Riv-64-H), Riverside Co.

Florida—State Hy. Dpt., Tallahassee, 2 concrete pipe and box culverts, Rd. 10, between Portland and Bruce, S. P., Job 6003-105, Walton Co. $25,000.

Bids Asked November 8

Pennsylvania—State Hy. Dpt., Harrisburg, constructing I-beam bridge and 1 rein.-con. structure over Sand Pond Creek and Johnson's Creek and native stone or crushed aggregate base with bituminous surfacing, 1.079 ft. L. R. 63058 (3), 63055 (2) Wayne Co., rein.-con. bridge over Mitchell Creek, rein.-con. paving, surfacing pavement and crushed aggregate base with bituminous surface 1,200 ft. L. R. 22 (12); T. R. U. S. 15, Tioga Co. Plans deposit $2.50 each. T. C. Frame, ch. engr.

Bids Asked November 12

N. J., Hackensack—Charles B. Bleasby, chn. P. Wks. Com., Bd. Freeholders Bergen Co., major repairs to the Overpeck Creek bridge on Bergen Turnpike between village of Ridgefield Park and Ridgefield Boro.

Bids Asked November 14

California—State Div. Hys., 808 State Bldg., Los Angeles, rein.-con. box girder overcrossing on Hollywood Parkway at Grand Ave., Los Angeles Co. Over $40,000. G. T. McCoy, 808 State Bldg., Los Angeles, engr.

Bids Asked November 18

Kan., Kansas City—City and Wyandotte Co. Bd. Comrs., c/o H. H. Thorn, clk., Court House, rebuilding Central Ave. viaduct. $350,000. Sverdrup & Parcel, 1148 Railway Exchange Bldg., St. Louis, Mo., engrs. CD 7/3—ENR 7/25.

LOW BIDDERS

Michigan—State Hy. Dpt., Lansing, Oct. 9, rein.-con., steel bridge, over Portage Creek, Kalamazoo Co., from L. W. Lamb, 1833 Park Rd., Holland, **$64,686**; Bridge over Black River, Sanilac Co., from F. C. Atlewed, 19712 Littlefield St., Detroit, **$109,540**. CD 10/2/46—ENR 10/10/46.

Michigan—State Hy. Dpt., Lansing, Oct. 10, bridge over Grand Trunk R.R., Oakland Co., from E. C. Nolan & Son, 8121 Warren Blvd., Centerline. **$46,671.**

Michigan—State Hy. Dpt., Lansing, Oct. 9, grade separation (Highway Underpass) and ramps (Highway Approaches Carrying Edsel Ford Expressway near Livernois Ave., tracks of Pere Marquette Railway over the Detroit, Wayne Co., from Jutton-Kelly Co., Dearborn. **$357,714.**

New York—Bureau Contrs. & Accounts, Albany, received no bids Oct. 16, 3 grade separation structures 0.56 mi. Queens Co. CD 10/2—ENR 10/10.

South Carolina—State Hy. Dpt., Columbia, Oct. 15, bridges in Berkley, Georgetown and Williamsburg Counties, and Charleston Co., from McMeekin Const. Co., Cheraw, **$112,727** and **$83,628** respectively***Darlington and Marlboro Counties, from Bowers Constr. Co., 805 W. South St., Raleigh, N. C., **$100,621*****Dillon Co., from C. Y. Thomason Co., Greenwood, **$107,331*****Hampton Co., from Wannamaker & Wells, Inc., Orangeburg, **$48,957.** CD 10/3—ENR 10/10.

Pennsylvania—State Hy. Dpt., Harrisburg, rejected bids Oct. 4, bridges 0.24 mi. Bucks Co., L.B. **$131,748**; 1.01 mi. Cambria Co. L.B. **$284,757.** Will readvertise. CD 10/8—ENR 10/10, under L.B.

Tennessee and Arkansas—State Hy. Comn., Little Rock, Ark., and Dpt. Hys. & P. Wks. of Tenn., Nashville, Tenn., concrete trestle and piers of the Arkansas approach of Mississippi River Bridge at Memphis, Tenn., from Merritt-Chapman & Scott Corp., 1. Batter Pt., New York, N. Y. **$487,316.** Revised plans, Modjeski & Masters, State St. Bldg., Harrisburg, Pa., engrs. CD 10/15—ENR 10/17, under L.B.

Virginia—State Dpt. Hys., Richmond, rejected bids Aug. 20, four bridges Fairfax Co. L.B. **$515,708.** CD 8/23—ENR 8/29, under L.B.

Virginia—State Hy. Dpt., Richmond, Oct. 15, 3 bridges and 0.54 mi. paving Rte. 58, Pittsylvania Co., from Harvey H. Stewart, 604 Hawthorne St., Charlotte, N. C. **$236,446.** CD 10/3—ENR 10/10.

CONTRACTS AWARDED

Arkansas—State Hy. Dpt., Little Rock, 344 ft., 2 concrete, steel bridges, Grant Co., to S. M. Dixon, Warren, **$55,999**; 276 ft., 2 concrete bridges, Columbia Co., to D. F. Jones Constr. Co., 115 N. Spring St., Little Rock, **$47,488.** Bids 10/11. Received no bids Oct. 11, bridge in Carroll Co. CD 10/1—ENR 10/3.

Oklahoma—State Hy. Dpt., Capitol, Oklahoma City, 3 rein.-con., steel bridges over the Caney River, on Hy. 60, east of Bartlesville, Washington Co., to J. A. Raines & Co., Muskogee. **$261,233.** Est. $239,544. Awarded 10/10. H. E. Bailey, Capitol, engr.

STREETS AND ROADS

Construction Reports received since this section went to press will be found in Last Minute Construction Reports.

BIDS ASKED

Bids Asked October 28

N. Y., Pleasantville — Village Clerk, 45 Wheeler Ave., grading, paving Tompkins St. CD 9/28/44—ENR 10/15/44.

Bids Asked October 29

Kansas — State Hy. Dpt., Oswego, grading 1.019 mi. Proj. F137(3) Pt. II, Labette Co.; 0.525 mi., Proj. F73(5), Cherokee Co.; concrete paving 0.74 mi. Proj. F2(13) Rt. I, Labette Co.; grading, concrete paving 10.939 mi. Proj. F2(13) Pt. II, 0.786 mi., Proj. F137(3) Pt. I, both Labette Co.; resurfacing material, 3.019 mi. Proj. 4594; 3 mi. Proj. 4593, both Linn Co.; 9.679 mi. Proj. 4595, Wilson Co.; 11.227 mi. Proj. 4592, Franklin Co.; 4.855 mi. Proj. 4591, Coffey Co.; 6.001 mi., Proj. 4590; 7.51 mi. Proj. 4589, both Bourbon Co.; 20.82 mi. Proj. 4588AB, Anderson Co. R. C. Keeling, Topeka, engr.

N. Y., New York—Bd. Transportation, 250 Hudson St., New York, Zone 13, furnishing, installing asphalt pavement in trackways of surface railroads of New York City Transit System, BMT Div.

N. Y., New York—President Bronx Boro, Bronx County Bldg., 851 Grand Concourse, Zone 51, sheet asphalt on concrete repaving Wythe Pl., Kossuth, Beekman and Findlay Aves.

Oklahoma—State Hy. Dpt., Capitol, Oklahoma City, concrete paving 4.1 mi. State Hy. 13, beginning 14 mi. northwest of Ada, Pontotoc Co., $125,034; asphalt surfacing 5.2 mi. U. S. 70 south of Broken Bow, $43,831; 5.9 mi. U. S. 70 northeast of Idabel, $47,078, both McCurtain Co.; 3.1 mi. U. S. 70 east of Ft. Towson, Choctaw Co., $27,968; grading, draining 2.9 mi. county road west of Eufaula, McIntosh Co., $13,638; 4.1 mi. U. S. 75 beginning 3 mi. north of Ochelata, $106,558; 1.07 mi. U. S. 60 east of Bartlesville, $107,756, both Washington Co.; 5 mi. county road east of La Vern, $16,494; 3.8 mi. county road south and west of Buffalo, $17,714, both Harper Co.; 5.5 mi. Hy. 30 north and west of Hollis, Harmon Co., $141,578; 5.5 mi. U. S. 75 north of Caney River near Ochelata, Washington Co., $288,184; 4.9 mi. U. S. 70 southeast of Madill, Marshall Co., $70,367; 5.9 mi. U. S. 70 east of Broken Bow, McCurtain Co., $166,107; grading, draining and 1 bridge 6.3 mi. on 41 east of Binger, Caddo Co., $231,350; double bituminous on gravel surfacing 5 mi. U. S. 59 north of Sallisaw, Sequoyah Co., $64,319; 5 mi. Hy. 67 east of Drumright, Creek Co., $80,276; 6.5 mi. U. S. 70 east of Broken Bow, McCurtain Co., $167,619; grading, draining, traffic bound surfacing 6 mi. Hy. 32 west of Courtney, Love Co., $130,179; 3 mi. county road north of Eufaula, McIntosh Co., $14,434; grading, traffic bound surfacing and substructure for bridge 0.2 mi. farm to market road near Stillwell, Adair Co., $8,974; grading, draining, double bituminous on gravel surfacing 4.4 mi. Hy. 9 east of Haskell Co. line, $65,516; 4.2 mi. Hy 9 near Whitesboro, $62,251, both Le Flore Co.; traffic bound surface course 5.2 mi. county road west of Horning, Osage Co., $12,630; single bituminous stabilized surfacing 3.1 mi. Hy. 32 at Rubottom, Love Co., $28,514; 6.3 mi. Hy. 41 east of Burger, Caddo Co., $70,421; grading, draining, graveling 6.4 mi. Hy. 99 beginning 7 mi. north of Stroud, $142,362; 6.9 6.9 mi. Hy. 99 north of Stroud, $179,571, both Lincoln Co.; 3.4 mi. Hy. 99 east of Cushing, Payne Co., $92,484. H. E. Bailey, Capitol, Oklahoma City, engr.

Bids Asked October 30

Louisiana—State Hy. Dpt., D. Y. Smith, dir., Baton Rouge, sand clay gravel surfacing material furnished and dumped 15.6 mi. Lobdell-Chamberlin, Chamberlin-Ewinville, Chamberlin-Arboth and Port Allen-Lobdell Hys., State Routes 30, 135 & 319, S.P. 225-01-05, 225-02-03, 226-01-06 and 861-13-04, West Baton Rouge Parish. CD 9/26—ENR 10/3.

Kansas — State Hy. Dpt., Emporia, grading 5.623 mi., Proj. FI 608(1), Lyon Co. R. C. Keeling, Topeka, engr.

Bids Asked October 31

Kansas — State Hy. Dpt., Junction City, grading, concrete paving, 0.235 mi. Proj. FAGM 363(9); 0.328 mi. Proj. UI 363(8), both Geary Co. R. C. Keeling, Topeka, engr.

N. C., Goldsboro—City, A. B. Sansbury, mgr., paving, curbing, guttering, etc., streets. Plans deposit $10. W. C. Olsen, 5 Exchange Pl., Raleigh, engr.

Bids Asked November 1

Kentucky — State Dpt. Hys., Frankfort, drainage structures and reconstructing grade 6.878 mi. Simington-Flatwoods Rd., Kentucky 207, beginning at Simington and exten. to Flatwoods, S.P. 45-131, Greenup Co.; grading, draining, traffic bound surfacing 9.583 mi. Salyersville-Royalton-Hindman Rd., Kentucky 7, section of road through Royalton, S.P. 77-60, Magoffin Co.; grading, draining, gravel surfacing for flood damage repair 7.556 mi. McCarr-Ranson-Ky., 199 (Blackberry Creek) Rd., beginning approx. 2 mi. north of Ky. 199 and exten. down Right Fork of Blackberry Creek, WER 166), S.P. 98-683, Pike Co.

New Jersey — Spencer Miller, Jr., comr. State Hy. Dpt., Trenton, grading 2.06 mi. Route 4 (Parkway), Sect. 6, from Central Ave. to Lehigh Valley R.R., in Clark and Cranford Twps., Fed. Proj. U-188 (2), Union Co.

Bids Asked November 5

La., New Iberia—Mayor and Bd., City Hall Bldg., concrete paving, etc., approx. 23,441 sq. yd. streets. Plans deposit $10. J. M. Rochel, New Iberia, engr.

New Jersey—State Hy. Dpt., Trenton, grading Route 4, Sect. 6, Union Co. Plans deposit $10.

Bids Asked November 6

Arizona—State Hy. Comn., grading, draining, base material and bituminous surface treatment Douglas-Safford Hy. beginning about 3½ mi. east of Pearce and exten. approx. 10¼ mi. northwesterly, S. 114 (8), AFE 6668. W. C. Lefebvre, hy. engr.

Bids Asked November 7

Florida—State Hy. Dpt., Tallahassee, reworking, widening lime rock base, applying bituminous surface treatment, etc. 18.91 mi. Rd. 31, between Rd. 13 in Waldo and point approx. 12.91 mi. North, S.P., Job 2608-104, Alachua Co., $250,000; lime rock base widening strips with asphaltic concrete surface course, Type II, over entire width of pavement and dressing shoulders and slopes 3.592 mi. Rd. 17 between Plant City and Polk City Line, S.P., Job 1010-104, Hillsborough Co., $60,000; reconditioning, widening lime rock base, constructing bituminous retread surface course, drag seal coat, etc. 21.896 mi. Rd. 23 between Rd. 316 and Manatee Co. line, S. P., Job 1006-107, and bituminous retread surface course 6.16 mi. Rd. 30 between Rds. 23 and 5 S.P., Job 1000-105, both Hillsborough Co., $250,000; lime rock base widening strips with an asphaltic concrete surface course, Type II, and dressing shoulders and slopes 2.851 mi. Rd. 17 between Auburndale and Lake Alfred, S.P. Job 1402-109, Polk Co., $60,000; clearing, grubbing, grading, Ocala lime rock base, bituminous surface treated pavement, etc. 0.743 mi. between Rds. 2 and 202 near Lake Fairview, S.P., Job 7500-101, Orange Co., $40,000. H. P. Coloney, state hy. engr.

Bids Asked November 8

Pennsylvania—State Hy. Dpt., Harrisburg, rein.-con. paving 3 rein.-con. structures and drainage on Rte. 119, Sect. 5; rein.-con. paving, widening pavement with rein.-con. native stone base or crushed aggregate base with bituminous surface, 3 rein.-con. structures Rte. 119, Sect. 5-A; Rte. 119 Sect. 6 and Rte. 49 Sect 3 from west of Schellsburg Boro to near the village of Wolfsburg, Bedford Co., total length 37,360 ft. Over $500,000. Plans deposit $2.50 each. T. C. Frame, ch. engr.

Pennsylvania—State Hy. Dpt., Harrisburg, rein.-con. paving, incl. exten. structure, constr. I-beam bridge, 40,868 ft. L.R. 294 (2); T.R. 78, Mercer and Crawford Counties; rein.-con. paving, rein.-con. bridge and native stone Type B or crushed aggregate base with bituminous surface 1,284 ft. L.R. 178 (6); T.R. 202, Bucks Co.; rein.-con. paving, incl. 1 rein.-con. structure, constr. native stone or crushed aggregate base with bituminous surface, 1 plate girder and rein.-con. I-beam bridge, 5,328 ft. L.R. 52 (7); T.R. 53, Cambria Co.; rein.-con. paving, incl. exten. structure, native stone or crushed aggregate base with bituminous surface, 12,180 ft. L.R. 99, (1-AA), T.R. U.S. 120, Elk Co.; crushed aggregate base with bituminous surface, surfacing existing pavement with bituminous surface, bituminous surface for paving railroad crossing and shoulder constr. 1,040 ft. L.R. 262 (R-3); T.R. 80, Indiana Co.; native stone or crushed aggregate base with bituminous surface, and 1 cement rubble masonry structure, 1,735 ft. L.R. 61020 (5); T.R. 390, Pike Co.; rein.-con. paving, 2,601 ft. L.R. 7 (10); T.R. 1, S. 4, Wayne Co.; 679 ft. L.R. 439 (13); T.R. 180 and 992 Westmoreland Co. Plans deposit $2.50 each. T. C. Frame, ch. engr.

LOW BIDDERS

D. C., Wash.—District Comrs., District Bldg., Oct. 14, improv. Reno Rd. N.W. from Quebec to Van Ness Sts., Yuma St. to Nebraska Ave. N.W., from Highway Constr. Co., P.O. Box 4437. **$191,876.** CD 10/8—ENR 10/10.

STREETS AND ROADS (Low Bidders, Cont'd.)

†**Idaho**—Pub. Rds. Admin., Sonna Bldg., Boise, received no bids Oct. 10, grading, Bridging Idaho City-Stanley Hy., Boise Co. **$50,000.** Will readvertise in 1947. CD 10/3.

Idaho—State Hy. Dpt., Boise, imprv. 2.498 mi. Idaho Co., from Shoshone Constr. Co., Twin Falls. **$41,260.** Est. $38,171.

Kansas—State Hy. Dpt., Independence, rejected bids Sept. 27, imprv. 3.639 mi. S. 238 (1). L.B. **$8,552**; 0.801 mi. S. 239 (1). L.B. **$1,-819**; 2.253 mi. S 240 (1) Pt. 1. L.B. **$4,284**, all foregoing Montgomery Co. CD 9/17—ENR 9/19.

Kentucky — State Dpt. Hys., Frankfort, Oct. 11, imprv. 6.694 mi. Hart Co., from Paul A. Teegarden & Co., Columbus, Ind., **$55,391** ***4.872 mi. Henderson Co., from Corum & Edwards, Madisonville, **$224,413**4.812 mi. Laurel Co., from Arnett Constr. Co., Berea, **$103,541**4.562 mi. Taylor and Larue Counties, from H. F. Mathis, Bardstown, **$41,191.** CD 9/26—ENR 10/3.

Maryland — State Roads Comn., Baltimore, Oct. 8, imprv. 6.6 mi. Anne Arundel Co., from Easton Hy. Corp., Brooklyn. **$48,240.** CD 10/1/46—ENR 10/3/46.

★**Michigan** — State Hy. Dpt., Lansing, Oct. 10, imprv. 6.583 mi. Genessee Co., from J. A. McKay & Sons, 6485 Nine Mile Rd., E. Van Dyke, **$461,563**3.035 mi. Genessee Co., from Taylor Bros., Inc., 790 Haynes St., Birmingham, **$275,589**; 5.035 mi. Ingham Co., and 5.782 mi., Oakland Co., from Cooke Const. Co., 1216 Penobscot Bldg., Detroit, **$541,319** and **$155,310**, respectively***5.606 mi. Luce Co., from Alpine Const. Co., St. Ignace, **$88,703**2.004 mi. Kent Co., from Nagelkirk & Rantam, Grand Rapids, **$43,093**4.853 mi. Saginaw Co. and 3.271 mi. Saginaw and Tuscola Counties, from Bridgeport Core Sand Co., 125 Davenport St., Saginaw, **$309,042** and **$206,874** respectively***4.22 mi. Macomb Co., from Julius Porath & Sons Co., 702 Transportation Bldg., Detroit, **$625,992.**

★**New York**—Bureau Contrs. & Accounts, Albany, Oct. 16, imprv. 2.03 mi. Jefferson Co. from Warren Bros. Roads Co., 38 Memorial Dr., Cambridge, Mass., **$370,281**, est. $405,000***1.27 mi. Erie Co., from John F. Kendall Co., Jackson Bldg., Buffalo, **$99,073**, est. $144,000***2.52 mi. Steuben Co., from A. L. Blades & Sons, Hornell, **$376,293**, est. $405,000***5 mi. Suffolk Co., from Andrew Weston Co. Inc., Woodmere, **$265,826**, est. $386,000. Received no bids Oct. 16, imprv. 9.61 mi. Warren and Essex Counties; 1.13 mi. Onondaga Co.; 4.7 mi. Tompkins Co.; 2.65 mi. Livingston Co.; 11.73 mi. Clinton and Franklin Counties. CD 10/2—ENR 10/10.

Ohio—State Hy. Dpt., Columbus, rejected bids Oct. 8, imprv. 2.239 mi. Lawrence Co., L.B. **178,039**; received no bids Oct. 8, imprv. 0.205 mi. Mahoning Co. L.B. **$17,550**; 0.498 mi. Knox Co. L.B. **$26,750**; cancelled bids to have been opened Oct. 8, imprv. 1.495 mi. Mahoning Co. **$28,720**; 1.114 mi. Lorain Co. **$58,000**; 0.601 mi. Trumbull Co., **$12,600.**

South Carolina—State Hy. Dpt., Columbia, Oct. 15, from J. F. Cleckley & Co., Orangeburg, imprv. S-158(1), Allendale and Barnwell Counties, **$169,109**from Sloan Const. Co., Inc., Greenville, S. C. 4.270, Anderson Co. **$54,980**; S-116(1), Calhoun Co. **$131,932**; S.C. 30.247, Parts 1 and 2, Laurens Co., **$75,359**; S.C. 37.265 Oconee Co., **$79,899**from American Const Co., Columbia, S-217(1), Chesterfield Co., **$143,381**from Cherokee, Inc., Columbia, S-213(1), Dorchester Co. **$80,452**from Loftis Co., Builders Bldg., Charlotte, N. C., S-196(1), McCormick Co., **$101,406**from Robert Lee, Inc., Manning, S-114(3), Edgefield Co., **$121,596.** CD 10/3—ENR 10/10.

Virginia—Dpt. Hys., Richmond, Oct. 15, imprv. 1.25 mi. Culpeper Co., from Ralph E. Mill Co., Salem, **$83,444**3.92 mi. Craig Co., and 3.23 mi. Bland Co. from John A. Archer & Con, Wytheville, **$107,908** and **$**[illegible]304 respectively***1.57 mi. Warren and Rappahannock Counties, from Hodgin & Gilliam, Upperville, **$138,043**3.83 mi. Middlesex Co., from F. W. Grannis Co., Fayetteville, N. C., **$117,713**4.08 mi. Accomack Co., from Bero Eng. & Constr. Corp., 305 McKinley Bldg., 259 Delaware Ave., Buffalo 2, N. Y., **$400,295.** CD 10/3—ENR 10/10.

CONTRACTS AWARDED

Arkansas—State Hy. Dpt., Little Rock, imprv. 8.55 mi. Lee Co. and 3.33 mi. Washington Co., to D. F. Jones Constr. Co., 115 N. Spring St., Little Rock, **$194,363** and **$81,715** respectively***5.67 mi. Sevier Co., to Southeast Constr. Co., Pine Bluff, **$81,433**7.75 mi. Nevada Co., to Linwood Smith, Lake Village, **$53,349.** Grand total $410,862. CD 10/1—ENR 10/3.

★**California**—State Hy. Dpt., State Bldg., Los Angeles, imprv. 4¼ mi. Los Angeles Co., to Peter Kiewit & Sons Co., 345 Kieways Ave., Arcadia. **$1,543,233.** CD 10/1—ENR 10/10, under LB

Idaho—State Hy. Dpt., Boise, imprv. 7.607 mi. Bannock Co., to Grant Constr. Co., Springfield, Utah, **$427,054**, est. $449,820***5.1 mi. Bannock Co., to H. A. Gardner, Blackfoot, **$79,336**, est. $79,854***12.6 mi. Lemhi Co., to Nick Burggraf, Idaho Falls, **$375,481**, est. $364,027. Grand total $881,871. Bids 10/11.

Ill., Quincy—City, City Clk., City Hall, imprv. 0.3475 mi. Sect. 59-CS, to Rees Constr. Co., Quincy. **$66,905.** Bids 9/30. CD 10/10—ENR 10/17, under LB.

Mass., Newton—City of Newton, City Hall, 1000 Commonwealth Ave., Newton Center, concrete paving Lowell Ave., to A. V. Taurasi Co., Inc., 40 Court St., Boston. **$71,520.** Bids 10/2, awarded 10/9. CD 9/24—ENR 9/26.

Missouri—State Hy. Dpt., Jefferson City, imprv. 3.863 mi. Miller Co., own forces. **$40,-097.** Bids 8/2. CD 7/24.

Neb., Lincoln—City, street car track removal Projects 3 and 4 and resurfacing Project 26, to Abel Constr. Co., 895 N. 16 St. **$160,325.** CD 1/17/45—ENR 2/8/45.

New Jersey—State Hy. Dpt., Trenton, imprv. 1.432 mi. Passaic Co., to George M. Brewster & Son, 275 Fort Lee Rd., Bogota. **$886,000.** Bids 7/22, awarded 8/2. CD 7/24—ENR 8/1, under LB.

New Jersey—State Hy. Dpt., Trenton, imprv. 1.518 mi. Middlesex Co., to George M. Brewster & Son, 275 Fort Lee Rd., Bogota. **$883,158.** Bids 10/10. CD 9/20—ENR 9/26.

New Mexico—State Hy. Dpt., Santa Fe, widening pavement, concrete curbing, guttering, etc. 2.548 mi. S.R. 47 on N. Second St. and U. S. Hy. Route 66, East Central Ave., Albuquerque, SP Proj. FAS 86 and FAP 118, Bernalillo Co., to J. H. Ryan, Box 513, Albuquerque. **$107,379.** Bids 10/11.

New York—Bureau Contrs. & Accounts, Albany, grading, 4 grade separation structures on Northern State Parkway, at County Line Rd., Sweet Hollow and Round Swamp Rds., Route 110, Nassau and Suffolk Counties, to Andrew Weston Co., Inc., Woodmere. **$715,-089.** CD 9/20—ENR 9/26, under LB.

New York — Bureau Contrs. & Accounts, Albany, grading, and drainage structures on Catskill Thruway from county line southward to Canal Hall Rd., Uster Co., to Grandview Co., 6 Grandview St., Mt. Vernon. **$777,976.** Bids 9/18. CD 9/20—ENR 9/26, under LB.

Ohio—State Hy. Dpt., Columbus, grading, paving, 3 concrete bridges 0.366 mi. Perry Co., to V. N. Holderman & Sons, 297 S. High St., Columbus, Zone 15, **$96,114.** Est $102,700. CD 9/24—ENR 9/26.

Pennsylvania — State Hy. Dpt., Harrisburg, imprv. 3.04 mi. Northumberland Co., to F. D. Kessler, Inc., Northumberland. **$980,269.** CD 9/17—ENR 9/19, under LB.

Que., Arvida — City, Oct. 4, constructing 1.3 mi. road from Taschereau Rd. to Saguenay River, to Pic Constr, Co. Ltd., Arvida. **$139,-110.** R. A. Lemieux, c/o owner, engr. CD 9/24—ENR 9/26.

EARTHWORK, WATERWAYS

Construction Reports received since this section went to press will be found in Last Minute Construction Reports.

BIDS ASKED

Bids Asked October 28

P. E. I. Charolettetown—Secy. Dpt. Reconstr. & Supply, Ottawa, Ont., crib and concrete wall. About $150,000.

Bids Asked October 30

Louisiana—State Hy. Dpt., D. Y. Smith, dir., Baton Rouge, Thompson Creek Retards, untreated timber pile retards filled with compressed brush and sacked concrete, etc., State Route 3, S. P. 19-04-12, East Feliciana and West Feliciana Parishes.

Bids Asked November 13

†**Idaho**—Bureau Reclamation, Denver, Colorado, furnishing del. f. o. b. cars shipping point or f. o. b. cars Cascade, one 12 ft. x 13.38 ft. electric motor driven fixed wheel gate hoist, complete with controller, pushbutton station, limit switch, position indicator, and gate and idler sheaves, Payette Div., Boise Project, Spec. 1500, W. R. Young chf. engr.

Bids Asked November 14

†**Va., Norfolk**—U. S. Eng., Fort Norfolk, removing shoal from Norfolk Harbor at Norfolk and Western Railway Coal Pier 1, Inv. 44-110-47-8. CD 8/19—ENR 8/22, under LB.

Bids Asked November 18

†**Colorado** — Bureau Reclamation, Denver, furnishing, del. f. o. b. cars at shipping point or f. o. b. cars at Granby, one 14 inch cone plug valve or one 14 in. ring follower gate for the outlet works at Granby Dam, Colorado—Big Thompson Project 1, Spec. 1501, W. R. Young, chf. engr.

†**Idaho**—Bureau Reclamation, Denver, Colo., furnishing, del. f.o.b. cars at shipping point or f.o.b cars at Cascade, two motor-driven radialgate hoist, etc., for Cascade Dam, Payette Div., Boise Project, Spec. 1503, W. R. Young, chf. engr.

†**Montana** — Bureau Reclamation, Denver, Colo., furnishing, del. f. o. b. cars shipping point f. o.b. cars at Fallon, screw lift vertical gates and gate lifts for Fallon Unit Canals and Laterals, Second Div., Buffalo Rapids Proj., Spec. 1493, W. R. Young, chf. engr.

Bids Asked November 19

Ind., Rochester—Dale Zimmerman, Court House, dredging 1,000,000 cu.yd. Mud Creek and 45 open branches of Mud Creek Drainage Dist., near here. $100,000. Plans Deposit $25.

Bids Asked November 20

†**Georgia**—U. S. Eng., 2301 Grant St., Mobile 7, Ala., design, manufacture, testing at delv. f. o. b. railroad cars at Cartersville main unit head gates and 2 service unit head gates with frames, guides, hoists, and appurtenant equipment for Allatoona Dam, Etowah River, near Cartersville, Serial No. 01-076-47-53. CD 10/4—ENR 10/10.

†**Idaho**—Bureau Reclamation, Denver, Colo., furnishing, del. f. o. b. cars at shipping point or f. o. b. cars at Jenness, one motor driven deep-well, turbine-type pump, unit; one motor-driven, rotary-type, vacuum pump unit; one motor-driven air compressor; and motor-driven propeller-type fans with motor operated louvers for the "C" Line Canal Pumping Plant, Payette Div. Boise Project, Spec. 1502, W. R. Young, chf. engr.

Bids Asked November 22

†**Idaho**—Bureau Reclamation, Denver, Colo., furnishing, del. f.o.b. cars at shipping point or f.o.b. cars at Jenness, 2,300 volt motor-control switchgear with transfer truck or dolly, required for removing and handling the breakers; four 15 kva., 2,400 to 120/240 volt single-phase, 60 cycle, air or noninflammable liquid insulated, self-cooled, indoor-type distribution transformers with taps; for four units at the "C" Line Canal Pumping Plant, Payette Div., Boise Project, Spec. 1504, W. R. Young, chf. engr.

LOW BIDDERS

†**Idaho and Colorado**—Bureau Reclamation, Dpt. Interior, Denver, Colo., installing 2 high pressure gate assemblies in outlet works of Cascade Dam, Boise Proj. Idaho, Horsetooth Dam, Colorado-Big Thompson, Proj., Colo., from Joshua Hendry Iron Wks., 544 Market St., San Francisco, Calif. **$67,027.** CD 10/1—ENR 10/10.

†**Illinois**—U. S. Eng., U. S. Court House and Custom House, St. Louis 1, Mo., Oct. 9, 500 lin. ft. bank protection in Mississippi River at Cairo Protection, 8 mi. above mouth of Ohio River, Serial 23-065-47-56, from Hough-Cowe & Co., 320 N. 4 St., St. Louis 2, Mo. **$40,200.** CD 10/1—ENR 10/3.

★**Tex., Houston**—City, J. M. Nagle, mgr., rejected bids Oct. 7, concrete and earth dam on San Jacinto River. L.B. **$7,560,280.** CD 10/14—ENR 10/17, under LB.

CONTRACTS AWARDED

†**Arizona** — Bureau Reclamation, Denver, Colo., synchronous condenser and control equip. for Tucson substation, Davis Dam Proj. t Spec. 1407, to General Electric Co., 650 17 St., Denver, Colo. **$148,984.** Awarded 10/10.

AIRPORTS & AIRBASES

Construction Reports received since this section went to press will be found in Last Minute Construction Reports.

BIDS ASKED

Bids Asked October 29

Okla., Oklahoma City—HANGAR—E. Simon, city clk., CAA hangar and office adds. at Will Rogers airport. $325,000. Plans deposit $25. V. G. Thompson, 1100 W. Main St., engr. CD 10/2—ENR 10/10.

LOW BIDDERS

★**N. Y., Idlewild**—ELECTRICAL SYSTEM, etc.—Comr. Marine & Aviation, Pier A, foot of Battery Pl., North River, New York, Zone 4, Contr. 2492 (revised), electrical telephone and communications conduit systems at Municipal Airport, Contr. 29 (revised), from Lord Electric Co., Inc., 10 Rockefeller Plaza, New York, Zone 20. **$2,147,775.** CD 10/3—ENR 10/10.

CONTRACTS AWARDED

Ill., Freeport—AIRPORT—City, City Hall, imprv. airport, to Brautigan-Trucco Co., 4846 N. Elston St., Chicago. **$137,183.** Bids 10/8. CD 10/4—ENR 10/10.

Ont., Sault Ste. Marie—HANGAR—Dpt. Lands & Forests, and Dpt. P. Wks., Toronto, Provincial Air Station, consisting airplane hangar, engine testing house, fabric shop, general offices and storage of parts, testing shop, boiler house imprvs., addns., etc., to J. J. Fitzpatrick & Son, 127 Church St. About **$250,000.** CD 9/13—ENR 9/19.

LATIN AMERICA

Costa Rica—Compania Radiografica Internacional de Costa Rica, San Jose, transmitter station, and cable from San Jose to Pavas, to Ferrocarrie Electrico del Pacifico, San Jose. Est. **$200,000.**

PUBLIC BUILDINGS

Construction Reports received since this section went to press will be found in Last Minute Construction Reports.

BIDS ASKED

Bids Asked October 28

†**N. J., Camp Kilmer**—U. S. Eng., 120 Wall St., New York, N. Y., converting barracks into apartments.

PUBLIC BLDGS. (Bids Asked, Cont'd.)

Ont., Hamilton—G. E. Billson, archt., 63 John St., S., 3 story, 82½x104 ft., brick Earl Haig Hall, concrete fdns., for East End Branch, Canadian Legion. About $210,000

Bids Asked October 29

Mass., Gloucester—Commonwealth of Mass., 100 Nashua St., Boston, cold storage bldg. addn. at Gloucester Fish Pier; furnishing, installing addnl. equipment in above bldg. Plans deposit $5 each. CD 2/13/45—ENR 3/8/45.

Bids Asked October 30

Ind., Peru—Bd. P. Wks., M. Blue, clk., City Hall, Peru, municipal power plant imprvs. incl. rein.-con., structural steel, piping, water treatment sys., feed water heater, 2 boiler feed pumps (30,000 lb. water per hr.), back feed pumps (250 G.P.M.), booster pump (100 G.P.M.) wash pump (250 G.P.M.) and condensate pump (75 G.P.M.). Bevington, Taggart & Fowler, Inc., 730 Indiana Pythian Bldg., Indianapolis, mech. engr.

N. Y., Binghamton—Bureau Contrs. & Accounts, Albany, alterations, repairs to convert armory into vocational school.

†N. Y., Oswego—Federal Works Agency, 731 Custom House, New York, Zone 4, miscellaneous repairs to post office.

Bids Asked November 1

★**†N. Y., Peekskill**—U. S. Eng., 120 Wall St., New York, Zone 5, Franklin Delano Roosevelt Hospital at Crugers Park, near here, for Veterans Admin., Vermont Ave. between H and I Sts. N. W. Wash., 25, D. C. $10,000,000. Plans deposit $50. CD 7/26—ENR 8/1.

Bids Asked November 5

Sask., Moose Jaw—C. M. Nixon, Moose Jaw, 50 homes, for Wartime Housing Ltd., Moose Jaw. About $250,000. CD 3/14—ENR 6/13.

Bids Asked November 6

Minn., Robbinsdale—Bd. Educ., W. S. Gibson, clk., 20 classroom school. $400,000. Plans deposit $20. Haxby & Bissell & J. S. Belair, 1111 Nicollet Ave., Minneapolis, assoc. archts. CD 11/21/45—ENR 1/3/46.

N. Y., New York—New York City Housing Auth., 122 E. 42 St., Zone 17, Amsterdam Houses (Project NYS-5) in area bounded by W. 61, W. 63 and W. 64 Sts., West End and Amsterdam Aves. Plans deposit $75. CD 1/22/45—ENR 2/8/45.

Bids Asked November 7

Tex., Orange—West Orange Independent School Dist., c/o Roy Smith, Orange, rein.-con., brick, hollow tile walls, etc., school. $225,000. Plans deposit $25. Wyatt C. Hedrick, 5301 Fannin St., Houston, archt. CD 6/20—ENR 7/25.

Bids Asked November 8

Tenn., Memphis—University of Tennessee, c/o O. W. Hymann, 874 Union Ave., dentistry bldg. $945,000. Walk C. Jones & Son, Shrine Bldg., archt. CD 1/17—ENR 3/7.

Bids Asked November 13

Ore., Portland—School Bd., 631 S. E. Clackamas St., Creston School. $500,000. Plans deposit $50. CD 4/9—ENR 6/13.

Bids Asked November 15

†Arizona — Bureau Reclamation, Denver, Colorado, furnishing, del. f.o.b. cars shipping point or f.o.b. cars Louise, 5 stop-log guides for intake structure, Davis Power plant; 3 stop-log guides for the spillway, Davis Dam; and 2 stop-log guides for the outlet structures, Davis Dam, Davis Dam Project, Spec. 1496, W. R. Young, chf. engr.

Bids Asked November 20

★**†N. D., Minot**—U. S. Eng., Fort Peck, Mont., constructing John Moses Veterans Memorial General Hospital. $1,500,000. CD 9/16—ENR 9/19.

Bids Asked November 26

★**†Colo., Grand Junction**—U. S. Eng., 21 St. and Virginia Ave. N. W., Wash. 25, D. C., 150 bed veterans hospital and utilities for Veterans Admin., Vermont Ave. between H and I Sts. $2,750,000. CD 10/11—ENR 10/17 under L. B.

LOW BIDDERS

Ga., Atlanta—State Dept. Agriculture, State Capitol Bldg., Bldgs. A, B, and C, housing farmers market Talmadge Dr., from A. J. Collins, Red Rock Bldg. $209,464. W. W. Simmons, 33 Hunter St. S. W., archts.

Mo., Maplewood (St. Louis, Zone 17 P. O.)—City, J. P. Usher, clk., indefinitely postponed construction city hall, incl. fire house, police station and library, $346,000; bldg. to house street dpt., equipment, $36,000; exten. imprv. sewers, $24,000; imprv. streets, $148,000. Bonds defeated. CD 10/2—ENR 10/17.

Mo., Affton (St. Louis 23, P. O.)—School Dist. of Affton Bd. Educ., L. C. Geil, pres., 8520 Mackenzie Rd., Affton, Oct. 14, 1 story, brick, concrete school, from J. A. Prahl Contg. Co., 9840 Reavis Rd., St. Louis, Zone 23, $206,574 base bid. CD 4/8.

Neb., Lincoln—Bd. Control, State Capitol Bldg., Oct. 1, packing plant at state penitentiary from Olson Constr. Co., 410 S. 7 St. $78,223. Bruce Hazen, 305 Stuart Bldg., archt. CD 9/18—ENR 9/26.

†N. Y., Brooklyn—Yards & Docks Annex, Navy Dpt., Arlington, Va., Oct. 15, altering Repair Shop Bldg. 296, at Navy Yard, from Colman Constr. Co., 264 Gold St. $68,820. CD 10/11.

Pa., Monessen—School Dist. of Monessen, High School Bldg., rejected bids Oct. 3, 2 story, bsmnt., brick high school. $250,000. CD 9/18.

Tex., Cameron—City, project abandoned, electric light plant. $500,000. CD 10/16—ENR 10/31.

CONTRACTS AWARDED

†California—Bureau Reclamation, Denver, Colo., pipe, fittings, valves for Keswick Power Plant, Central Valley Proj., Spec. 1403, to Western Piping & Eng. Co., 119 Kansas St., San Francisco. $43,590. Bids 8/12, awarded 10/10; pipe fittings, to Crane & O'Fallon, 1651 15 St., Denver, Colo., $8,658, awarded 10/9. CD 8/5.

Minn., Madison — City, N. M. Sorenson, mayor, furnishing, installing 1500 kw. single automatic extraction type turbine-generator unit with accessories and 2500 sq. ft. surface condenser and auxiliaries; to Westinghouse Electric Corp., 2303 N. E. Kennedy St., Minneapolis. $59,000. Bids 9/18. CD 8/21—ENR 8/29.

Neb., Norfolk—State Bd. Control, Lincoln, general contract ward bldg. at Norfolk State Hospital, to Beckenhauer Bros., Norfolk, $246,300; heating to W. Volkman, Norfolk, $43,240. Bids 10/1. CD 9/4—ENR 9/12.

Tex., Galena Park—Galena Park Independent School Dist., Junior High School, to Marshall Constr. Co., 4009 Center St., Houston. Approx. $210,000. Bids Sept. 30 rejected. CD 9/17—ENR 9/19.

†Tex., Wichita Falls—Pub. Housing Auth. N. H. A., Electric Bldg., Fort Worth, Sheppard Army Field housing, to Ramey & Mathis, Paramount Bldg., Amarillo. $210,000.

N. S., Bedford Basin—Dpt. Reconstruction & Supply, Ottawa, Ont., laboratory and administration area and exterior work to bldgs. at R. C. N. Magazine, to Diamond Constr. Co. Ltd., Devon St. S., Fredericton, N. B. About $422,000. CD 4/25—ENR 5/16.

Que., Riviere du Moulin—Dpt. Rds., Quebec City, reconstructing 1 story, 45x125 ft. garage, 1 story, 45x110 ft. storage bldg. 2 story, 36x65 ft. office bldg., own forces. About $75,000. E. Gohier, c/o owner, engr.

COMMERCIAL BUILDINGS

Construction Reports received since this section went to press will be found in Last Minute Construction Reports.

BIDS ASKED

R. I., Cranston—E. C. Picerne, Cranston St., 3 story, bsmnt., 80x150 ft., brick, steel, cinder block apartments, Cranston St. $210,000. CD 4/16—ENR 4/25.

SOON LETS CONTRACT

N. Y., Rego Park—Jewish Center of Rego Park, Inc., 53-54 Wethevale St., soon lets contract synagogue. $400,000. Extended date. CD 9/20—ENR 19/3.

LOW BIDDERS

Tex., San Antonio—C. L. Browning, Jr., 812 Insurance Bldg., project abandoned 173 frame residences, to concrete fdns., etc. $875,000. CD 3/22—ENR 4/18.

CONTRACTS AWARDED

Calif., Venice—Truxton Bldg. Corp., 5848 W. Pico Blvd., Los Angeles, 104 frame, stucco, 6 room dwellings in Venice Dist. to Lawrence McConville, 6205 S. Harvard Blvd., Los Angeles. $864,980.

Coun., Bridgeport — Bridgeport Land & Realty Co., A. Gorbach, pres., 945 Main St., 500 frame houses, Frenchtown Rd. Owner builds. Over $205,000. CD 8/22—ENR 8/29.

Conn., East Haven—East Haven Homes, Inc., 273 Main St., seven 2 story 60 family garden apartments, Main St., and Bradley Ave., to Martin Olson, 273 Main St. Est. $225,000. H. S. Kelley, 282 York St., New Haven, archt., CD 10/11—ENR 10/24.

Conn., Glastonbury—Carl E. Larson & Son, Marlboro, 40 frame houses on 20 acre tract, Overlook Rd. Owner builds. $280,000. CD 10/10—ENR 10/24.

Conn., Glastonbury—Charles H. Littel, Chestnut Hill Rd., thirty-five 1 acre sites with homes, Chestnut Hill Rd. Owner builds. Over $205,000. CD 10/10—ENR 10/24.

Conn., Moodus — David Bockstein, Bashen Lake, Moodus, frame houses on 30 acre site. Owner builds. $205,000. CD 10/10—ENR 10/24.

Conn., Springdale—Time Magazine, Inc., 9 Rockefeller Plaza, New York, N. Y., 2 story, brick veneer, frame two family houses, incl. 20 bldgs. and 2-car garages, to Edward J. Naughton, 324 Burns St., Forest Hills, N. Y. Est. $210,000. A. R. Fritz, 150 S. Forest Ave., Rockville Center, N. Y., archt.

Ind., Indianapolis—Wides Realty Co., 2760 W. 30 St., Indianapolis, twenty 2 story, brick, limestone apartments, on 15 acre tract on E. 46 St., extending two blocks west to Haverford Ave. and South to 44 St. Owner builds. $1,500,000-$2,000,000. Henry Goebel, 5500 Bluff Rd., archt. George Rooker, 108 E. Washington St., engr. CD 9/28/45—ENR 10/11/45.

Ind., Wabash—Loving Homes, Inc., 529 E. Town St., Columbus, O., 100 homes, own forces. $650,000.

Ill., Chicago—Illinois Bell Telephone Co., 212 W. Washington St., 4 story, 84x156 ft., brick, concrete, steel telephone exchange, 1900-18 N. Richmond St., to Dahl-Stedman Co., 11 S. LaSalle St. Est. $825,000. Holabird & Root, 333 N. Michigan St., archts.

Mass., Roslindale—J.&M. Construction Co., 200 Hancock St., Quincy, thirty 6 room frame homes, American Legion Parkway. Owner builds. $235,000. J. Guarino, 24 St., Andrews Rd., East Boston, archt.

N. J., Newark—Weston Electrical Instrument Corp., 614 Frelinghuysen Ave., design and construction 3 story engineering bldg., to Walter Kidde Constr., Inc., 140 Cedar St., New York, 6, N. Y. Est. $650,000.

★**O., Warrensville**—Center Northfield Housing Co., c/o Roy Brown, pres., 51 multiple brick dwelling units and 8-acre park area for veterans housing, on 45 acre tract bounded by Northfield and Warrensville Rds. and Harvard Ave. Owner builds. $2,500,000.

★**Ore., Eugene** — Brighter Homes Store Co., 858 Pearl St., 128 homes, Hawthorne Pl., day labor. $1,000,000.

★**S. C., Spartanburg**—The Wadsworth Corp., Spartanburg, 200 homes, to be known as Franklin Village, on Greenville Hy., own forces. $1,500,000.

Tex., San Antonio—E. J. Burke & Son, 4220 S. Zarzamora St., residential constr. Owner builds. Approx. $210,000.

Tex., San Antonio—St. Gerard's Church & Parish, 1617 Iowa St., high school, to Joe Joeris, 219 Ave. A. $217,500. Bids about 9/26. CD 9/20—ENR 9/26.

Vt., Burlington—Bishop DeGosbriand Hospital, S. Prospect St., brick, steel, concrete hospital addn., incl. childrens wing, obstetrical dpt., to Walsh Bros., 150 Hampshire St., Cambridge, Mass. Est. $500,000. J. F. Jefferman, 131 State St., Boston, Mass., archt.

Wash., Vancouver—St. Joseph's Hospital, 500 E. 12 St., hospital addn., to Ross B. Hammond Co., 1241 N. Williams St., Portland, Ore. Est. $250,000. CD 5/9/45—ENR 5/17/45.

INDUSTRIAL BUILDINGS

Construction Reports received since this section went to press will be found in Last Minute Construction Reports.

BIDS ASKED

Ind., Anderson—POWER PLANT—Nicholson File Co., 34 and Lynn Sts., power plant. $75,000 or more.

R. I., Bristol—WAREHOUSE—U. S. Rubber Co., 355 Valley St., Providence, 1 story, brick, steel warehouse. $55,000.

R. I., Providence — WAREHOUSE — Merchants Cold Storage & Warehouse Co., 160 Kinsley Ave., altering brick, steel warehouse. $110,000. Jenks & Ballou, 1600 Industrial Trust Bldg., archts. CD 8/14—ENR 8/22.

R. I., Warwick—FOUNDRY—Warwick Co., Idaho Ave., foundry, Quonset Hut constr., concrete fdn., Jefferson Ave. $60,000.

SOON LETS CONTRACT

Mo., St. Louis—FACTORY—Bemis Bros. Bag Co., Cotton Belt Bldg., 408 Pine St., Zone 2, soon lets contract 1 story, 113x116 ft. rein.-con., brick, glass blocks factory addn., 1053 S. Vandeventer Ave. Bids 10/7.

Pa., Clearfield—STORAGE—Central Rural Electric Co-operative Assn., 212 N. 3 St., soon lets contract 1 story, 127x173 ft. brick, steel, tile storage, Lawrence Twp., near here. $76,000. Hunter Caldwell & Campbell, 3601 5 St., Altoona, archts.

Tex., Dallas—COLD STORAGE PLANT—F. A. Kadane, Pure Ice & Cold Storage Co., 906 S. Harwood St., soon lets contract 2 story, 100x150 ft. rein.-con. ice and cold storage plant. $240,000. Bartram C. Hill, 4703 Ross St., archt. CD 5/20—ENR 5/30.

Tex., Ganado—PLANT—Central Power & Light Co., c/o H. C. Loehr, Central Power & Light Bldg., Corpus Christi, soon lets contract brick or tile, concrete, wood locker and frozen food plant. J. M. Marriot & Wallis J. Wade, 900 Frost Bank Bldg., San Antonio, assoc. archts.

LOW BIDDERS

Mo., St. Louis—PLANT—Century Electric Co., 1806 Pine St., Zone 3, Oct. 9, 6 story, bsmnt., 75x130 ft., 5 story, 109x180 ft. top addn., brick, rein.-con. industrial plant, 19 and Chestnut Sts., from Gamble Constr. Co., 620 Chestnut St., Zone 1. CD 9/23—ENR 9/26.

R. I., Providence—PLANT—American Laundry Co., c/o O. O. Gauvin, archt., 72 Weybosset St., cancelled bids, 1 story, bsmnt., cinder block, cleaning and fur storage plant. Over $55,000. Revising plans. CD 9/10—ENR 9/12.

Tex., Freeport—PLANT—Dow Chemical Co., Freeport, project abandoned tank car plant. $100,000; 2 masonry pump stations, concrete slab fdns., $75,000. C. S. Frick, c/o owners, engr. CD 5/22—ENR 5/30, under LB.

INDUSTRIAL BLDGS. (Contracts Awarded. Cont'd.)

CONTRACTS AWARDED

Conn., East Hampton—FACTORY—A. M. Starr Net Co., Summit St., 2 story, timber, concrete factory addn., Summit St., to Dennis O'Brien & Sons, Inc., 190 Trumbull St., Hartford. Ebbets & Frid, 15 Lewis St., Hartford, archts.

Conn., Willimantic—PLANT—Eastern Live Poultry Co., W. Main St., 1 story, 65x180 ft., brick, cinder block plant, Columbia Ave., to J. S. Nasin Co., 392 High St. Est. **$55,000.**

Fla., Jacksonville—PUBLISHING—Florida Publishing Co., Jacksonville, 2 story, steel, masonry bldg., to G. D. Auchter Co., foot of Adams St., Zone 1. **$190,000.** Awarded 10/11. CD 6/6—ENR 6/27.

Fla., Jacksonville—PLANT—Joseph M. Ripley, 1706 Landon Ave., Zone 7, steel, concrete block, brick and glass brick mixing plant, own forces. **$250,000.** Twentieth Century Designers, 1710 Landon Ave., archts.

Ga., Atlanta—SERVICE—Victory Motors, Inc., North Ave., service garage and parts depot, to Ray M. Lee Co., 337 Peachtree St., N.E., **$124,000.** Cuttins & Howard, Mortgage Guarantee Bldg., archts. CD 8/19—ENR 8/22.

Idaho, Fenn — GRAIN ELEVATOR — Union Warehouse & Supply Co., Fenn, grain elevator, to Henry George & Sons, Hutton Bldg., Spokane, Wash. **$90,000.**

Idaho, Genesee—GRAIN ELEVATOR—Genesee Union Warehouse Co., Genesee, grain elevator, to Henry George & Sons, Hutton Bldg., Spokane, Wash. **$150,000.**

Ill., Chicago—FELT MILL—Globe Roofing Products, 2211 Schrage St., Whiting, Ind., 1 story, 75x400 ft., brick, concrete, steel felt mill, to Paul Schwendener, 7553 S. Chicago St. Est. **$150,000.** CD 7/26—ENR 8/1.

Ill., Chicago—WAREHOUSE, etc.—1201 N. Hickory Corp., 1028 W. Van Buren St., 1 and 2 story, 70x180 ft., brick, concrete, steel warehouse and office, to R. C. Wiebdit Co., 2253 Blue Island***plumbing, to J. T. Dorsey & Son, 321 W. Huron St.***heating, to H. H. Prentice, 1048 W. Van Buren St.***electrical work, to H. Neweard & Co., 549 W. Washington St. Est. **$100,000.** A. Gordon Co., 1 N. LaSalle St., archt.

Ill., Chicago—FACTORY—Industrial Molded Products, 2035 Charleston St., masonry contract 1 story, 135x241 ft., brick factory, to Toft & Engmark, 5014 Wareland St.***carpentry, to J. Nelson, 6158 W. Leader St.***plumbing, to H. & S. Dubnow, 2243 W. Division St. Est. **$130,000.** Sachtleben & Weinper, 179 W. Washington St., archts.

Ill., Chicago—FACTORY—J. Gus Liebenow, 1633 S. Clinton St., 1 story, 100x100 ft., brick factory, to Ashland Constr. Co., 6808 N. Clark St.; plumbing, to J. G. Weber & Co., 2841 N. Clark St Est. **$60,000.** Durant & Berquist, 6808 N. Clark St., archts.

Ill., North Chicago—FERMENTATION—Abbott Laboratories, 1400 Sheridan St., 1 and 2 story 90x180 ft., asbestos, brick fermentation bldg. wings, and connecting tunnel, 14 St. and Sheridan Rd., to Carroll Constr. Co., 333 N. Michigan Ave., Chicago. **$382,000.** Awarded about 10/3. E. A. Ravenscroft, c/o owner, North Chicago, engr.

Me., Portland—AUTO SALES and SERVICE GARAGE—Clifford Sweringer, Yarmouth, 1 story, 110 x 155 ft. and 35 x 40 ft. brick, steel, concrete, auto sales and service garage. Owner builds. **$70,000.** J. Saunders, 193 Middle St., Portland, archt.

Mass., Roxbury—LAUNDRY—New England Baptist Hospital, 91 Parker Hill Ave., 3 story, 30 x 90 ft., rein.-con. laundry, Parker Hill Ave., to Aberthaw Constr. Co., 80 Federal St., Boston. Est. **$60,000.** Coolidge, Shepley, Bulfinch & Abbott, 1 Court St., Boston, archts.

Mass., Worcester—WAREHOUSE—New England Grocers Supply Co., 41 Artic St., 1 story, 200x400 ft., brick, steel, concrete warehouse, to Jefferson Constr. Co., 52 Washington Ave., Chelsea. Est. **$500,000.** Bids 8/9. CD 8/9—ENR 8/15.

Minn., St. Paul—POWER PLANT—Waldorf Paper Products Co., 2236 Myrtle Ave., power plant imprvs., steam generating unit, to Fuel Economy Engrg. Co., 510 New York Bldg. Approx. **$300,000.** Helmick, Edeskuty & Lutz, 412 Essex Bldg., Minneapolis, engrs.

Mo., Kansas City—WAREHOUSE—Natkin & Co., 1800 Baltimore St., Kansas City, Mo., industrial warehouse, to Swenson Constr. Co., 3305 Terrace St., Kansas City, Mo. Est. **$55,000.** Kivett & Myers, 1016 Baltimore St., Kansas City, archts.

Mo., North Kansas City—WAREHOUSE—A. M. Castle & Co., 1132 W. Blackhawk St., Chicago, Ill., general contract warehouse, to S. Patti Constr. Co., 134C Admiral Blvd., Kansas City, Mo. **$236,000.** CD 9/24—ENR 9/26.

N. J., Hillside—WAREHOUSE, etc.—**Kresge** Dpt. Store of Newark, 715 Broad St., Newark, 2 story warehouse and distribution center, N. Broad St., to David O. Evans, 1445 N. 3 St. Est. **$500,000.**

N. J., Hillside — STORAGE — Lambrecht Creamery Co., 168 Mt. Pleasant Ave., Newark, 1 story cold storage bldg., N. Broad St., to David O. Evans, 1445 N. 3 St., Hillside. Est. **$58,000.**

★**O., Cleveland**—BUS TERMINAL—Greyhound Terminal of Cleveland, R. W. Todd, pres., 2600 Chester Ave., 150 x 250 ft., rein.-con. granite bus terminal, 13 St. and Chester Ave., to A. M. Higley Co., 2036 E. 22 St. Est. **$1,000,000.** CD 10/3—ENR 10/10.

O., Cleveland — FACTORY — Tinnerman Products, Inc., 2038 Fulton Rd., design and construction brick, steel, concrete factory, to The Austin Co., 16112 Euclid Ave. Est. **$55,200.**

O., Cleveland—ELECTRIC SERVICE—Cleveland Electric Illuminating Co., 75 Public Sq., electric service bldg., W. 130 St. and Hummel Rd., to Sam W. Emerson Co., 1836 Euclid Ave. Est. **$87,130.**

O., Cleveland — WAREHOUSE — Dregalla, Inc., 1212 Sumner St., 1 story, 125x175 ft., brick, concrete, steel terminal warehouse, loading docks and offices. E. 24 St., to Sam W. Emerson Co., 1836 Euclid Ave. Est. **$100,000.** Bonfield & Cumming, 1900 Euclid Ave., archt.

O., Cleveland—FACTORY—**Ferbert-Schorndorfer** Co., 12815 Elmwood Ave., 1, 2 and 3 story, brick, steel, concrete factory office, and laboratory addns., to Dunbar Co., 8201 Cedar Ave. Est. **$105,000.** G. S. Rider Co., Terminal Tower, engr. CD 10/3—ENR 10/10.

O., Cleveland—POWER HOUSE—Mt. Sinai Hospital, Dr. H. L. Rockwood, 1800 E. 105 St., 1 story, 40x85 ft., brick, steel, concrete power house, to Sam W. Emerson Co., 1836 Euclid Ave. Est. **$230,000.** CD 10/3—ENR 10/10, under Commercial Bldgs.

★**O., Cleveland** — FACTORY — Perfection Stove Co., 7609 Platt Ave., brick, steel, concrete factory addns., 1150 Ivanhoe Rd., to G. A. Rutherford Co., 2725 Prospect Ave. Est. **$1,925,000.** CD 8/9—ENR 8/22.

Pa., Charleroi—GARAGE, etc.—West Penn Power Co., Wood St., Pittsburgh, 2 story, bsmnt., 60x83 ft., brick, tile, steel garage and service, to E. Crump, Jr., 4301 Bigelow Blvd., Pittsburgh. Est. **$60,000.** Hoffman & Crumpton, 700 Century Bldg., Pittsburgh, archts.

Pa., Hatboro—PLANT—Fischer & Porter Co., Hatboro, design and construction 1 story, 90x340 ft., brick, concrete, steel mfg. bldg., to Jack S. Steele Co., 16 S. Broad St., Phila. **$75,000.** Awarded 10/4.

Pa., Mainland—PLANT—Pleasant Valley Packing Co., Mainland, frame, cinder block meat processing plant to Swartley & Clemmer, Lansdale. **$55,000.** Awarded 10/4.

Pa., Phila.—PUMP HOUSE—The Barrett Div. of Allied Chemical & Dye Corp., Margaret and Bermuda Sts., 24x31 ft. fire pump house to Lauter Constr. Co., 112 S. 16 St. **$56,000.** Awarded 10/4.

Pa., Phila—SALES AND SERVICE—J. Kerbeck Co., 2439 N. Broad St., 1 story, 58x160 ft., concrete block auto sales and service bldg., to Lombardi & Co., 345 N. 12 St. **$55,000.** Awarded 10/3. Richard R. Neely, 10 S. 18 St., archt.

Pa., Phila.—BOILER ROOM—Phillipsburg Print Co., Forresdale St., and Frankford Ave., 1 story, 42x54 ft., brick, steel boiler room, to L. E. Bender, 1137 Wakeling St. **$55,000.** Awarded 10/2.

Pa., Phila.—GARAGE—Jack Swerman, 1 W. 3 St., Chester, garage, separate contracts. Over **$55,000.**

Pa., Phila.—FACTORY—Otto R. Trefz Jr. & Co., Inc., 1309 N. 27 St., factory addn. alterations, to Fred Houser, 25 Golf Rd., Upper Darby. **$55,000.** Awarded 10/4.

Pa., Pittsburgh—WAREHOUSE—Automatic Canteen Co. of Pittsburgh, Wabash Ave., 1 story, 100x120 ft. steel, reinforced warehouse, separate contracts. **$55,000.** J. W. Hoover, 1408 Keystone Bldg., 4 Avenue, archt.

Pa., Pittsburgh—FACTORY—Russell Birdsall & Ward, Coraopolis, 1 story, 53x145 ft., brick, steel corrugated metal siding factory, Moon Twp., Route 51, near here, separate contracts. **$65,000.** Frazier Co., 95 S. 16 St., Pittsburgh, engr.

R. I., Cranston—SHOP—Universal Windong Co., 1655 Elmwood Ave., Providence, 1 story, 95x380 ft., brick, concrete, steel machine shop addn., to Gilbane Bldg. Co., 90 Calverly St., Providence. **$106,200.**

Tenn., Memphis—SUB-STATION—Southern Bell Telephone & Telegraph Co., Hurt Bldg., Atlanta, Ga., sub-station, to Barge-Thompson Co., 136 Ellis St., Atlanta, Ga. Est. **$260,000.** Shutze & Armistead, 1330 Candler Bldg., Atlanta, Ga., archt.

Tex., Houston—GAS BOOSTER STATION—United Gas Corp., United Gas Bldg., natural gas booster station. Owner builds. **$85,000.** CD 1/14—ENR 1/24.

★**Tex., Pasadena**—PLANT—Champion Paper & Fibre Co., Pasadena, paper mfg. addn., and altering, imprv. paper mfg. plant, to Ebasco Service, Inc., Pasadena. **$2,375,00 and $525,000** respectively. CD 10/10—ENR 10/24.

Wash., Downs—GRAIN ELEVATOR—Odessa Union Warehouse Co., grain elevator, to Henry George & Sons, Hutton Bldg., Spokane. **$75,000.**

Wash., Harrington—GRAIN ELEVATOR—United Grain Growers, Harrington, grain elevator, to Henry George & Sons, Hutton Bldg., Spokane. **$150,000.**

Wis., Black Creek—FACTORY—Outagamie Producers Co-operative, Black Creek, 1 story, part bsmnt., 90x109 ft., steel, brick, tile factory addn., concrete fdn., to Ed. H. Meyer Constr., 75 Main St., Oshkosh. CD 9/16—ENR 9/26.

Wis., Manitowoc—WAREHOUSE—Lakeside Packing Co., Manitowoc, 1 story, 78x121 ft. brick, steel warehouse, concrete fdn., to Kasper Constr. Co., 1203 N. 16 St. P. Brandt, 104 N. 8 St., archt.

Wis., Milwaukee — WAREHOUSE — Ed. Schuster & Co., Inc., 2141 N. 3 St., Zone 12, 2 story, bsmnt., 130x140 ft., rein.-con. brick warehouse, piling fdn., Commerce St., to Selzer-Ornst Co., 6222 W. State St., Wauwatosa, Zone 13. Est. **$200,000.** Brust & Brust, 135 W. Wells St., Zone 3, archts.

Wis., Reedsburg—FACTORY, etc.—Reedsburg Development Co., Reedsburg, 1 story, 100x300 ft. steel, brick, factory and office bldg., concrete fdn., to F. S. Willis, 326 Hayes Blk., Janesville. Est. **$130,000.** Moe Bros. Mfg. Co., lessee. **Grasshold & Johnson**, 734 N. Jefferson St., Milwaukee, Zone 2, archts.

Wis., Watertown — WAREHOUSE — Watertown Elevator Co., 809 Station St., 1 story, 150x150 ft., rein.-con., steel, brick and block warehouse, concrete, stone fdn., day labor. Better Methods Ind. Eng. Co., 53 W. Jackson, Chicago, Ill., engrs. and archts.

UNCLASSIFIED

Construction Reports received since this section went to press will be found in Last Minute Construction Reports.

BIDS ASKED

Bids Asked October 30

N. S., Three Fathom Harbor—CAUSEWAY—Secy. Dept. P. Wks., causeway. About $50,000. Plans deposit $20. R. Blais, c/o owner, engr.

Bids Asked

Texas—PIPELINE—Pasotex Pipe Line Co., El Paso, 108 mi. 8 in. crude oil steel pipeline carrier from near Wink to Ft. Stockton area. $600,000.

LOW BIDDERS

★†**Montana and North Dakota**—TRANSMISSION LINE— Bureau Reclamation, Denver, Colo., Oct. 8, 78 mi. wood-pole transmission line between Glendive and Miles City, Mont., from Donovan, Inc., 1080 N. Hazel St., St. Paul, Minn., **$625,474**; 139 mi. line between Fort Peck, Mont., and Williston, N. D., and 179 mi. between Williston and Garrison, N. D., from Morrison-Knudson Co., Inc., 319 Broadway, Boise, Idaho, **$1,214,318** and **$1,606,840** respectively. Spec. 1411. CD 9/20—ENR 9/26

†**Ore., Salem**—POWER LINE—Bonneville Power Admin., P. O. Box 3537, Portland, conductor and conductor accessories for power line, inv. 3832, from Aluminum Co. of America, Gulf Bldg., Pittsburgh, Pa. **$183,665.**

CONTRACTS AWARDED

Arkansas—RURAL ELECTRIC LINES—Craighead Electric Co-operative, E. Walden, mgr., Jonesboro, Sect. 1, 209.6 mi. rural electric lines and 1 substation serving 493 customers in Greene Co., to **K & R Constr. Co.**, Jonesboro. **$223,130.** Southwest Electrical Engineers, Jonesboro, engr. CD 10/9.

Arkansas — GAS PIPELINE — Mississippi River Fuel Co., 407 N. 8 St., St. Louis, Mo., 12 mi. gas pipeline through Independence and Jackson Counties, to Holland Const. Co., Kennedy Bldg., Tulsa, Okla. Est. **$240,000.**

Arkansas—RURAL ELECTRIC LINES—North Arkansas Electric Co-operative, Inc., G. M. Keenan, mgr., Salem, 267 mi. addn. rural electric lines serving 840 customers in Fulton Co., own forces. **$404,000.** Southwest Engineers, Jonesboro, engrs. CD 9/26.

Arkansas — RURAL ELECTRIC LINES — South Central Arkansas Electric Co-operative, Inc., C. H. Griffin, mgr., Arkadelphia, 210 mi rural electric lines, Clark, Hot Springs, Dallas and Nevada Counties, force account. Approx **$283,000.** Frank Horton & Co., Lamar, Mo., engrs. CD 7/26—ENR 8/8.

Calif., Van Nuys—UNDERGROUND CONDUIT, etc.—South California Telephone Co., 740 S. Olive St., Los Angeles, approx. 9,875 trench ft. single and multiple tile duct underground conduit in and adjacent to Van Owen St., and 9,624 lin. ft. single and multiple tile underground duct in and adjacent to Wyandott St., to George J. Bock Co., 1120 N. Los Palmas St., Los Angeles. **$63,539.**

Iowa—RURAL ELECTRIC LINES—Guthrie Co. Rural Electric Co-operative Assn., J. A. McLuen, proj. mgr., Guthrie Center, 204 mi. single-phase, 7200 volt rural electric lines in Guthrie, Dallas and Audubon Counties, to Hoak Constr., Co., 621 63 St., Des Moines. **$211,500.** P. L. Burns, 824 Davis Bank Bldg., Davenport, engr. CD 6/14/45—ENR 6/21/45.

N. Y., Brooklyn—STATION FINISH—Bd. Transportation, 250 Hudson St., New York, Zone 13, station finish, Route 110, Sects. 7, 8 and 9, to Atlas Tile & Marble Co., 238 E. 26 St., New York, Zone 10. **$462,831.** Bids 9/23. CD 10/1—ENR 10/3, under L.B.

LAST MINUTE CONSTRUCTION REPORTS

WATER SUPPLY

Additional earlier Construction Reports will be found in the regular section.

BIDS ASKED

Bids Asked November 8

Tex., Harlingen—City, H. Ramsey, mayor, water sys. imprvs. $40,000. A Tamm, 316 E. Van Buren St., engr. CD 11/28/45—ENR 12/13/45.

LOW BIDDERS

Tex., Houston—City, Oct. 14, c. i. water-mains, in Golfcrest addn., from Kelly & Sons, 5462 Kirby Dr. **$30,948.**

CONTRACTS AWARDED

N. C., Roanoke Rapids—City, water extens., to Blythe Bros. Co., 424 S. Brevard St., Charlotte. **$109,505.** Est. $105,000. Bids 10/16. CD 10/2—ENR 10/10.

Tex., Terrell—City, municipal water filtration plant addn., to P. C. Sorensen Co., Southland Life Bldg., Dallas. **$31,400.** Powell & Powell, 2022 Rep. Bank Bldg., Dallas, engrs.

SEWERS, WASTE DISPOSAL

Additional earlier Construction Reports will be found in the regular section.

BIDS ASKED

Bids Asked October 21

N. Y., Brooklyn—President Brooklyn Boro, Boro Hall, Zone 2, relief sewers in Osborn St., Sutter, Blake and Dumont Aves., sewer easement continuation of Osborn St. from above location to Blake Ave. CD 8/31/45—1/28/44—ENR 9/20/45—2/10/44.

Bids Asked November 4

S. C., St. George—Town, E. H. Westbury, mayor, sewerage sys. Plans deposit $10. J. McCrady Co., 9 State St., Charleston, engr. CD 10/2—ENR 10/17.

Bids Asked November 14

N. Y., Port Washington—Bd. Sewer Comrs., Port Washington Sewer Dist., Port Washington, 38,000 lin. ft. vitr. clay sewer, branches, connections to existing sewers, etc. Plans deposit $20. C. Mac Cullum, 27 Williams St., New York, consult engr.; adv. ENR 10/24. CD 9/25—ENR 10/17.

LOW BIDDERS

Idaho, Twin Falls—City, City Hall, 5 mi. trunk line sewers, from Shoshone Co., Twin Falls. **$123,316.** CD 11/12/45.

N. H., Liberty — Village, indefinitely postponed bids to have been opened Oct. 14, garbage incinerator. **$100,000.** Bogart & Pohl, 39 Cortland St. New York, Zone 7, engrs. CD 9/11—ENR 9/19.

N. Y., Rome—Dpt. P. Wks., rejected bids July 19, incinerator. **$180,000.** CD 7/23—ENR 7/11.

CONTRACTS AWARDED

Conn., Bridgeport—City, F. Schwarzkopf, clk., 3,600 ft. 8- to 36-in. trunk sewers, incl. wells, manholes, etc., Pitt St., 2nd Sect., to Clark Sewer Constr. Co., 631 Lindley St. **$60,-804.** CD 9/19.

N. C., Roanoke Rapids—City, K. Jenkins, mayor, sanitary sewer extens., to Blythe Bros. Co., 424 S. Brevard St., Charlotte. **$83,-861.** Est. $92,000.

Tex., Sherman—City, J. L. Hardy, mgr., July 2, waste line running from Interstate Cotton Oil Refining Plant. Owner builds. Approx. **$40,000.** Bids 7/2. CD 5/23—ENR 5/30.

STREETS AND ROADS

Additional earlier Construction Reports will be found in the regular section.

BIDS ASKED

Bids Asked October 30

Arkansas—W. H. Sadler, State Hy. Dpt., Little Rock, grading and gravel base course 0.897 mi. Marion-East Rd.; grading, drainage structures gravel base course and bituminous surface course 1.315 mi. West Memphis, Hulbert Rd., both Crittenden Co. W. W. Zass, Little Rock, engr.

Bids Asked November 20

Tex., Dimmitt—Castro Co., Court House, grading, drainage, flexible base course with asphalt surfacing 20.79 mi. farm-to-market road and 4 mi. spur road. **$173,000.** Plans deposit $25. Gasie & Green Eng. Co., Tahoka, engrs.

LOW BIDDERS

Connecticut—State Hy. Comn., received no bids, Sept. 30, imprv. 7.110 ft. Smith and Robinson Rds., Franklin. 1.818 ft. Rd. 426, Saybrook. CD 9/19—ENR 9/26.

Florida—State Road Dpt., Tallahassee, Sept. 26, imprv. 10.846 mi. Palm Beach Co. from Langston-Hubbard Constr. Co., 112 W. Grant Ave., Orlando, **$188,815,** est. $175,000***17.763 mi. Gilchrist Co., from James H. Craggs Constr. Co., Ocala, **$260,840,** est. $225,000*** 4.084 mi. Calhoun Co., from John A. Benton, St. Petersburg, **$108,152,** est. $120,000. CD 9/9—ENR 9/12.

★**Florida**—State Rd. Dpt., Tallahassee, Oct. 17, imprv. 4.073 mi. Pinellas Co., 2.48 mi. Hillsborough Co., 6.596 mi. Pinnellas and Hillsborough Counties, from Cone Bros. Constr. C., Caesar Ave. and Cambridge St., Tampa, **$207,736***18.727 mi. Flagler Co., 6.75 mi. Duval and St. Johns Counties, from Duval Engr. and Contr. Co., E. Adams St., Jacksonville, **$359,080***16.719 mi. Gadsden Co., 13.42 mi. Leon Co., 12.886 mi. Wakulla and Leon Counties, 23.975 mi. Gadsden and Leon Counties and 7.801 mi. Escambia Co., from Smith Engr & Constr. Co., W. Pensacola St., Pensacola, **$940,746** and **$124,816** respectively. CD 10/10.

N. Y., New York — President Manhattan Boro, Municipal Bldg., Zone 7, Oct. 16, imprv. 93, 109, 117, 118 and 121 Sts., etc., Contr. 425; St. Nicholas Ave., 119 and 128 Sts., etc., from John C. Peterson Contr. Co., 113 S. Grand Ave., Baldwin. **$58,929.** CD 10/7—ENR 10/10.

Oklahoma—State Hy. Dpt., Oklahoma City, received no bids Oct. 15, grading, minor drainage structures 1.07 mi. Hy. 60, Washington Co. **$107,756.** CD 10/8—ENR 10/17.

★**Pennsylvania**—State Hy. Dpt., Harrisburg, Oct. 18, imprv. 37.635 ft. Schedule 1, Rte 55, Sect. 5A and Rte 46, Sect. 3; Schedule 2, Rte 55, ect. 5B and Rte 33, Sect. 2B; Schedule 3, Rte 55, Sect. 5C and Rte 33, Sect. 2C, Huntingdon Co.; from George M. Brewster & Sons, Bogota, N. J., **$3,124,562,** est. over $1,000,000 ***9.921 ft. L. R. 203 (R-1); T. R. 66 Armstrong Co., from The Ray F. Yount Co., Kittanning, **$441,817***471 ft. L. R. 163 (15); T. R. 309, Carbon Co., from Charles Riebe, Lansford, **$62,549***10,585 ft. L. R. 272 Spur (1-R), Erie Co., from Charles H. Fry Constr. Co., 1902 Cherry St., Erie, **$84,765***19.076 ft. L. R. 21 (1-A, 2-A), Appl. 472; T. R. 660, Tioga Co., from McMinns Industries, Inc., Lancaster, **$128,488.** Received no bids Oct. 18, imprv. 1,011 ft. L. R. 566; T. R. 244, Potter Co., will readvertise. T. C. Frame, c/o owner, ch. engr. CD 9/19—ENR 9/26.

CONTRACTS AWARDED

Florida—State Rd. Dpt., Tallahassee, imprv. 8.989 mi. Polk Co., to Cone Bros. Constr. Co., Caesar Ave. and Cambridge St., Tampa. **$506,-166.** Bids 9/19, awarded 9/26. CD 9/3—ENR 9/5, under LB.

Florida—State Rd. Dpt., Tallahassee, imprv. 24.601 mi. Lake Co., 14.368 mi. Orange Co., and 0.305 mi. Seminole Co., to J. D. Manly Const. Co., Leesburg. **$744,338.** Bids 10/3, awarded 10/10. CD 10/9—ENR 10/17, under LB.

Kan., Leavenworth—City c/o J. C. Walker, clk., concrete paving, to Collins Constr. Co., Leavenworth. **$66,589.**

✦**Mont., Missoula**—Pub. Roads Admin., Post-office Bldg., grading 10.5 mi. west fork, Bitterroot River forest development road, from Nilson-Smith Constr. Co., Great Falls **$203,-895** Est. $200,000.CD 10/3—ENR 10/10.

Oklahoma—State Hy. Dpt., Oklahoma City, imprv., 4.6 mi., Jefferson Co., to P & H Constr. Co., McAlester. **$43,850.** Est. $48,482. Bids 10/15, awarded 10/16. CD 10/8—ENR 10/17.

✦**Oregon** — P. Rds. Admin., Cascade Bldg., Portland, grading and bridge on 0.538 mi. Clackamas River Rd. and Hillockburn Rd. Mt. Hood National Forest, Clackamas Co., to T. Lillebo, Reedsport. **$75,130.** Bids 10/10. CD 8/27—ENR 8/29.

✦**Oregon** — P. Rds. Admin., Cascade Bldg., Portland, surfacing 24 mi. Clackamas River Timber Access Rd., to J. N. & M. J. Conley, 4617 S. E. Milwaukie St., Portland. **$179,989.** Bids 10/16 W. H. Lynch, div. engr.

Tex., Houston—F. Teague & Paul H. Wolf, Union National Bank Bldg., asphalt paving, concrete curbing and gutters. Owner builds. **$45,000.** CD 6/5—ENR 6/13.

Tex., Pelly—Tri-Cities Home Builders, Inc., Pelly, grading, asphalt paving, own forces. **$65,000.** CD 9/5—ENR 9/12.

Utah—State Rd. Comn., State Capitol, Salt Lake City, imprv. 7.164 mi. Rich Co., to Parsons & Fife, Brigham City. **$105,235.** Est. $102,691. Bids 10/15. CD 10/8.

Que., Roun—Dpt. Mines, Quebec City, roadwork on various streets, to Dan Lamothe, 210 North St., Noranda. **About $160,000.** CD 5/1—ENR 5/16.

EARTHWORK, WATERWAYS

Additional earlier Construction Reports will be found in the regular section.

BIDS ASKED

Bids Asked November 1

✦**Maryland** — U. S. Eng., Standard Oil Bldg., Baltimore, Zone 2, maintenance dredging Ocean City Harbor and Inlet and Sinepuxent Bay, Inv. 18-020-47-20.

Bids Asked November 9

Tex., Elsa — Hidalgo Co. Water Control & Imprvt. Dist. 6, and Engleman Gardens c/o A. L. Cramer, Elsa, drainage. $74,000. Extended date. A Tamm, 216 E. Van Buren St., Harlingten, consult. engr. CD 10/15—ENR 10/17.

Bids Asked November 16

Tex., Houston — Harris County Flood Control, Court House, drainage facilities, incl 460,000 cu. yd. dragline excav., 117,000 cu yd. dragline excav. and creosote timber piling bridge, 1,000,000 cu. yd. dragline excav. for Unit H-100, $125,000. Plans deposit $25. J. R. Putney, Court House, engr. CD 10/9.

Bids Asked November 18

✦**Utah** — Burau Reclamation, Denver, furnishing, del. f.o.b. cars at shipping point or f.o.b. cars Nash. 1 c.i. gate with handwheel-gate hoist and 2 c.i. gates with geared-gate hoists for Jordan Narrow Siphons, Provo Reservoir Canal, Deer Creek Div., Provo River Proj., Spec. 1507. Walker R. Young, ch. engr.

Bids Asked November 19

✦**Idaho** — Bureau Reclamation, Denver, furnishing, del. f.o.b. cars at shipping point or f.o.b. cars at Jenness, miscellaneous structural steel for the "C" Line Canal Pumping Plant, Payette Division, Boise Proj., Spec. 1505, W. R. Young, chief engr.

LOW BIDDERS

La., Oak Grove — Police Jury of West Carroll Parish, Oak Grove, 792,900 cu. yd. earth excav. in drainage projects, from Forcum—James Co., Louisiana Natl. Bank Bldg., Baton Rouge. **$87,219.**

CONTRACTS AWARDED

✦**Idaho** — Bureau Reclamation, Boise, preparation concrete aggregates, Kenner Deposit, Payette Div., Boise Proj., Spec. 1483, to Utah-Idaho Concrete Pipe Co., Nampa, **$29,200.** Bids 10/15. W. R. Young, Customhouse, Denver 2, Colo., ch. engr. CD 9/18—ENR 9/26.

✦**Texas** — U. S. Eng. Galveston, dredging Gulf Intracoastal Waterway between Matagorda Bay and Aransas City, Inv. 41-243-57-105, to Hendry Corp., Brownsville. **$82,984.** CD 10/1—ENR 10/3.

B. C., Kirkland Island — Dpt. P. Wks., Ottawa, Ont., channel protection at Kirkland Island, to Gilley Bros. Ltd., New Westminster. About **$58,000.** R. Blais, c/o owner, engr.

Ont., Collingwood — Dpt. P. Wks., Ottawa, Ont., dredging harbor, to Consolidated Dredging Ltd., 54 Chestnut Park, Toronto. Approx. **$26,000.** CD. 4/8—ENR 4/18.

Ont., London — Dpt. P. Wks., Ottawa, dredging in Thomas River, to Chatham Dredging & General Contr Co., Chatham. About **$61,000.** R. Blais, c/o owner, Ottawa, engr. CD 8/23—ENR 8/29.

AIRPORTS & AIRBASES

Additional earlier Construction Reports will be found in the regular section.

BIDS ASKED

Bids Asked November 11

✦**N. C., Washington**—AIRPORT IMPRVS.—Civil Aeronautics Admin., 84 Marietta St. N.W., Atlanta, Ga., drainage ditches at airport. Proposal 27-126. CD 1/9/45—ENR 2/8/45.

Bids Asked November 14

✦**Va., Gravelly Point** — HANGARS — Pub. Bldgs. Admin., FWA., Wash. 25, D. C., constructing Hangars 7, 8, 9, 11, 12, Washington Natl. Airport. Plans deposit $25; adv. ENR 10/24.

CONTRACTS AWARDED

Del., New Castle—AIRPORT—New Castle Co. Levy Court, airport addns., alterations, to Rupert Constr. Co., 1509 French St., Wilmington. **$125,000.** Bids 9/28, awarded 10/11. CD 8/29—ENR 9/5.

FOREIGN

Egypt—Royal Egyptian Embassy, 220 Kalarama Rd. N.W., Wash. 25, D. C., taking bids Jan. 30, 1947, electrical and mechanical plant for Aswan Dam Hydro-Electric Scheme. Kennedy & Donkin, 12 Caxton St., London, S.W. 1, consult. engrs.

PUBLIC BUILDINGS

Additional earlier Construction Reports will be found in the regular section.

BIDS ASKED

Bids Asked October 28

N. J., Essex Fells—Municipal Bldg., Roseland Ave., storage garage and service bldg., Runnymede and Buttonwood Rds. $60,000.

PUBLIC BUILDINGS (Bids Asked, Cont'd.)

Bids Asked November 4

★**Ont., Toronto**—J. D. Miller, deputy minister Dpt. P. Wks., Ontario Terminal Food Bd., G. F. Perkins, chn., excavation work in connection with Ontario Food Terminal, Queensway and Parklawn Aves. Total about $1,200,000. Shore & Moffat, 79 Queen St. E., archts. CD 8/23—ENR 9/9.

Bids Asked November 6

†**N. Y., Niagara Falls**—Federal Works Agency, 731 Custom House, New York, Zone 4, repairing post office.

Bids Asked November 8

Calif., Inglewood—Centinella Valley Union High School Dist., 235 S. Grevillea St., Inglewood, 1 and part two story, rein.-con. shop, 235 S. Grevillea St. $240,000. Extended date. Plans deposit $25. H. L. Gogerty Organization, 3123 W. 8 St., Los Angeles, archt. CD 10/2—ENR 10/10.

Bids Asked November 13

Ont., Belle River—North Essex High School Bd., Dr. T. G. Weise, chn., Windsor, 10-room school addn. About $210,000. Sinclair & Collins, 284 Dundas St., London, archts. CD 10/10—ENR 10/17.

LOW BIDDERS

Mo., Affton (St. Louis, 23, P.O.)—School Dist. of Affton, L. C. Geil, pres., 8520 Mackenzie Rd., rejected bids Oct. 14, 1 story brick, concrete school. L.B. **$206,574.** CD 10/21—ENR 10/24.

Tex., Alpine—Sul Ross State Teachers College, rejected bids Oct. 9, college bldg. constr. **$210,000.** CD 9/20—ENR 9/26.

CONTRACTS AWARDED

Ia., Muscatine — Municipal Water & Light Plant Bd. Trustees, H. W. Zeug, secy., power plant imprvs., incl. 12,500 kw. steam turbine generator, to General Electric Co., 1 River Rd., Schenectady, N. Y., **$345,000**; condensing equipment to Condenser Service and Engr. Co., Inc., 95 River St., Hoboken, N. J. **$50,479.** CD 9/3—ENR 9/5.

Minn., Alexandria—City, H. S. Campbell, clk., furnishing, installing turbine, condenser, etc., and metal clad switch-gear and auxiliary equipt. in municipal power plant, to General Electric Co., 630 Plymouth Bldg., Minneapolis, **$95,000** and **$52,025** respectively; condenser, to Allis Chalmers Mfg. Co., 1115 Foshay Tower, Minneapolis, **$28,750.** Bids 9/9 and 9/30. CD 8/7—ENR 8/15.

Mo., Marshall—City, c/o Clerk, power plant, to Ebbe Constr. Co., Trenton. **$272,000.**

Mont. Warm Springs—Warm Springs State Hospital, Warm Springs, 2 story, 213 x 231 ft., rein.-con., masonry men's dormitory, general contract, to Cahill-Mooney Constr. Co., Butte, **$326,720**; mechanical contract, to F. V. Reardon P. and H. Co., Butte, **$63,755.** CD **9/27/46**—ENR 10/3/46.

Pa., Torrance—Dpt. Property & Supplies, Harrisburg, Oct. 16, general contract west wing addn. to Bldg. 5, Torrance State Hospital, to Dick Constr. Co., 2532 Library Rd., Pittsburgh. **$244,800.** CD 9/17—ENR 9/19.

Que., Montreal—Wartime Housing Ltd., 159 Bay St., Toronto, Ont., 100 Homes, to J. L. E. Price & Co. Ltd., 680 Sherbrooke St. W. About **$350,000.**

Que., Riviere Du Moulin—Dpt. Rds., Quebec City, reconstructing garage, to J. Euclide Perron, Jacques Cartier St., Chicoutimi. About **$75,000.** CD 10/16—ENR 10/24.

COMMERCIAL BUILDINGS

Additional earlier Construction Reports will be found in the regular section.

SOON LETS CONTRACT

La., New Orleans — At office Stewart & Shearer, 45 Wall St., New York, N. Y., soon let contract Isaac H. Stauffer Memorial addn., for Eye, Ear, Nose & Throat Hospital, 115 Elks Pl. **$450,000.** Favrot & Reed, Nola Bldg., archts. CD 10/3—ENR 10/10.

LOW BIDDERS

Tex., Galveston — John Sealy Hospital and Sealy-Smith Foundation, 816 Strand St., project indefinitely postponed 4 story nurses home addn. **$250,000.** Bids 5/7. C. H. Page & Son, Gracy Bldg., Austin, archt. CD 4/25—ENR 5/2.

Tex., Midland — Midland Office Bldg. Inc., Midland, Oct. 16, superstructure 8 story, bsmnt., rein.-con., masonry office bldg., from J. W. Bateson, 1103 Irwin-Keasler Bldg., Dallas. Total est. **$700,000.** CD 9/24—ENR 9/26.

CONTRACTS AWARDED

Idaho, Pocatello — Bannock Development Co., Pocatello, housing for veterans on Wilson tract, to C. H. Elle Const. Co., Pocatello. Est. **$250,000.**

★**Neb., Scottsbluff** — St. Mary's Hospital, Scottsbluff, hospital, to Olson Constr. Co., 410 S. 7 St., Lincoln. Est. **$1,000,000.** CD 9/11—ENR 9/19.

Tex., Austin — The A Hotel Corp., Austin, 5 story, bsmnt., rein.-con. hotel, to Fulcher & Burgher Constr. Co., 3027 Main St., Dallas. Approx. **$225,000.** CD 10/16—ENR 10/24.

Tex., Austin — H. F. Green, 4804 Evans St., residential constr. Owner builds. **$210,000.** CD 10/17—ENR 10/24.

Wash., Seattle — A. Balch, 6800 48 Ave. N.E., 46 homes in 8,000 block on 36 to 41 Aves. N.E., day labor. **$414,000.** Thomas, Grainger & Thomas, Arcade Bldg., 2 and Union Sts., Zone 1, archts.

Man., St. Boniface — Henrid De Leeuw, 414 Des Meurous St., 8 apartment blocks, day labor. About **$250,000.** CD 10/9—ENR 10/24.

INDUSTRIAL BUILDINGS

Additional earlier Construction Reports will be found in the regular section.

BIDS ASKED

Conn., East Hartford—POWER PLANT—Pratt & Whitney Aircraft Div., United Aircraft Corp., 400 Main St., brick, steel, concrete power plant. $70,000. Albert Kahn Associated Architects & Engineers, Inc., 345 New Center Bldg., Detroit, Mich., engr. CD 10/15—ENR 10/17.

LOW BIDDERS

Tex., Garland—PLANT—Seiberling Rubber Co., 345 15 St., Akron, O., project abandoned, completing Banbury Plant bldg., C.A. **$277,830,** CD 10/8—ENR 10/10, under CA; new plant **$238,000,** water reservoir and cooling sys. for mfg. tires **$109,000,** remodeling portions of plant **$173,400,** CD 7/2—ENR 7/11.

CONTRACTS AWARDED

Calif., Azusa—PLANT—Precision Concrete Products Co., 672 S. Lafayette Park Pl., Los Angeles, concrete batching plant, rein.-con. 150-ton aggregate bin and 100 ton cement silo elevators, traveling hopper, etc., Irwindale Ave., south of Bonita Ave., near here. Owner builds. Over **$55,000.** N. D. Whitman, Jr., 40 S. Los Robles Ave., Pasadena, engr.

Calif., Culver City—PLANT—Carnation Milk Co., Oconomowoc, Wis., fresh milk plant, 2 story, bsmnt., 150x260 ft. bldg., 2 story, 100x150 ft. office, 85x570 ft., garage and shop, rein.-con., structural steel bldg., south of Exposition Blvd. at Jefferson Blvd., to Howard Hastings, Inc., 1135 N. Los Palmas Ave., Los Angeles. Approx. **$2,000,000.** J. K. Anderson, 5225 Wilshire Blvd., Los Angeles, engr. CD 7/24—ENR 8/8.

Calif., Norwalk—FACTORY—Pernot & Rich, 2546 San Fernado Rd., Los Angeles, 1 story, 140x120 ft. steel, corrugated iron and concrete block factory, 1222 N. Norwalk Blvd., to Edward R. Siple Co., 2545 San Fernando Rd., Los Angeles. Approx. **$97,000.**

Calif., Van Nuys—FACTORY—Simon Bros. Screen Co., 1154 Hart St., 1 story, 100x160 ft. rigid steel frame, rein.-con. factory and 30x70 ft., rein.-con. office, two 3 ton and one 4 ton cranes, to Buttress & McClellan, 1013 E. 8 St., Los Angeles. Approx. **$74,000.** J. MacDonald, 1013 E. 8 St., Los Angeles, archt.

Ill., Chicago—FREIGHT HOUSE—Pennsylvania R.R., J. D. Moffatt, ch. engr., (Western Region), Union Station, 1 story, rein.-con., steel, concrete block freight house, Chicago River and 16 St., and 1 story, rein.-con., steel, concrete block freight house between Lake and Fulton Sts., west of Maplewood St., to C. B. Johnson & Son, 6 N. Michigan Ave. Est. **$129,000** and **$154,500** respectively.

Ia., Clinton—PLANT—Pillsbury Mills, Inc., Metropolitan Bldg., Minneapolis, Minn., soy bean processing plant addn., to Jones-Hettelsater, Const. Co., 1012 Baltimore Ave., Kansas City, Mo. Approx. **$200,000.** CD 10/15—ENR 10/24.

Mo., St. Louis—FACTORY—Bemis Bros. Bag Co., Cotton Belt Bldg., 408 Pine St., Zone 2, 1 story, 113x116 ft., rein.-con., brick, glass block bag factory addn., 1058 S. Vandeventer Ave., Zone 10, to Gamble Constr. Co., 620 Chestnut St., Zone 1. Bids 10/7 Rathmann, Koelle & Carroll, 316 N. 8 St., Zone 1, archts. CD 10/16/46—ENR 10/24/46.

Mo., St. Louis—FACTORY—J. Bettendorf, 6000 Chippewa St., Zone 9, 1 story, 180x240 ft. factory, 5200 block of Manchester Ave., to I. E. Millstone Constr. Co., 4343 Clayton Ave., Zone 10. Bids 10/14. CD 10/15/46—ENR 10/17/46.

Mo., St. Louis—FACTORY—Majestic Mfg. Co., 2134 Delmar Blvd., 1 story, 301 x 402 ft., brick, steel, rein.-con. factory and office bldg., 3900 Neosho St., to L. O. Stocker Co., Arcade Bldg., 812 Olive St., Zone 1. Est. approx. **$523,000.** H. K. Graf, 2825 Olive St., Zone 3, archt.

N. Y., Rome—PLANT—Rome Cable Corp., Rome, mfg. bldg., to James Stewart & Co., 230 Park Ave., New York, Zone 17. Est. **$600,000.** CD 9/11—ENR 9/19.

Pa., Meadville—PLANT—Talon, Inc., 939 W. 26 St., Erie, 3 story, 40x320 ft., brick, steel, concrete connecting plant addn. between plants BW and D, to Geo. A. Rutherford Co., 2725 Prospect Ave., Cleveland, O. Est. **$200,000.** Bids 9/30, awarded 1015. CD 9/27—ENR 10/3.

Tex., Aransas Pass—QUICK FREEZING PLANT—Gulf Coast Industries, Inc., Aransas Pass, quick freezing plant, own forces. Approx. **$80,000.** CD 10/17—ENR 10/24.

Wash., Seattle—SHOP—G. Craig, 614 Elliott Ave. W., 1 story, 50x75 ft. masonry auto body shop, day labor. **$100,000.** K. Ripley, c/o owner, archt.

Wash., Seattle—BAKERY—Jersey Cream Baking Co., 501 3 Ave. N., 1 story, 100x220 ft. masonry bakery, day labor. **$90,000.** C. Moffitt, 5622 11 Ave. N.E. Zone 5, archt. CD 6/9—ENR 6/13.

B. C., Vancouver—GAS PLANT—B. C. Electric Railway Co. Ltd., 425 Carrall St., Vancouver, gas plant addn. 4,500,000 cu. ft. capacity water cooling tower, storage tanks and gasometer, to John Inglis Co. Ltd., 525 Seymour St. About **$700,000.** Awarded 10/10.

B. C., Vancouver—PLANT—Nalley's Ltd., 2742 W. Broadway, 3-unit factory to Marwell Constr. Co. Ltd., 410 Seymour St. **$150,000.** Awarded 10/5. CD 9/13—ENR 10/3.

B. C., Vancouver—PLANT—Wm. Scott & Co., 101 Water St., 2 story, 120x200 ft. frame, stucco egg storaging and processing plant, to Allan & Viner Constr. Co., Ltd., 602 W. Hastings St. **$55,000.** Awarded 10/5. McCarter & Nairne, 355 Burrard St., archts. CD 7/26—ENR 8/8.

Man., Winnipeg—FACTORY—L. & S. Electric Mfg. Ltd., 468 Ross Ave., 1 story, bsmnt. 40x110 ft., brick factory addn., to S. Liss, 622 Mountain Ave. About **$55,000.** L. Finch, C.P.R. Bldg., archt.

Ont., Chatham—PLANT—Speedway Petroleums, Ltd., 220 Victoria Ave., plant, office and service station, own forces. About **$60,000.**

Ont., Toronto—RESEARCH—Massey-Harris Co., Ltd., King St. W., structural steel, rein.-con. research, engineering, sales and Ontario bldg., King St. W., to A. W. Robertson, Ltd., 59 Bloor St. W. About **$650,000.** Allward & Gouinlock, 57 Bloor St. W., archts.

Ont., Toronto — PLANT, etc. — McGillvray Bros. Ltd., 258 Adelaide St. W., plant and office, Lake Shore Rd. and Parklawn Ave., Humber Bay, to Graham & Sibbett, Ltd., 388 Yonge St. About **$100,000.** C. B. Dolphin, 415 Eastern Ave., archt. CD 1/10—ENR 1/17.

Que., Arvida—FACTORY—Aluminum Specialties, Arvida, factory, to O. Gauthier, 46 Bosse St., Chicoutimi. **$100,000.**

Que., Coaticook—PLANT—Coaticook Textile Ltd., 330 Water St., plant exten., to Adelard Jacques, 159 Short St., Sherbrooke. About **$70,000.** D. Tremblay, 52 Prospect St., Sherbrooke, archt.

Que., Granby—PLANT—Imperial Tobacco Co. of Canada, Ltd., 3810 St. Antoine St., Montreal, 1 story, 50x200 ft. tobacco factory addn. at Empire Branch, 160 Cowie St., to B. A. Ryan, Ltd., 1808 William St., Montreal. About **$150,000.** CD 9/19—ENR 9/26.

Que., Lachine—SHOP—Dominion Bridge Co., Lachine, machine shop addn., to H. S. Kerr Ltd., 1410 Guy St., Montreal. **$65,000.** CD 3/14—ENR 5/2.

Que., Victoriaville—PLANT—Lactentia Ltd., (1st section) dairy plant, to J. E. Blais, Victoriaville. About **$175,000.** Total est. $500,000. CD 10/9—ENR 10/24.

Que., Ville La Salle—PLANT—Montreal Coke & Mfg. Co., Ltd., 435 St. Patrick St., plant addn., to Product Coke Ltd., c/o By-Product Coke Co. of Canada Ltd., P.O. Box 6110, Montreal. **$600,000**

Que., Warwick—PLANT—Warwick Woolen Mills, Warwick, plant, to Pondrier & Boulet Ltd., 55-18 St., Quebec City. About **$200,000.**

UNCLASSIFIED

Additional earlier Construction Reports will be found in the regular section.

BIDS ASKED

Bids Asked October 30

N. S., Canso — WHARF — Secy., Dpt. P. Wks., Ottawa, Ont., reconstructing wharf. About $27,000. Plans deposit $20. R. Blais, c/o owner, engr.

Bids Asked November 12

New York — PORTAL SUMPS, etc. — Port of New York Authority, 111 8th Ave., New York, Zone 11, portal sumps, pumps and pump rooms at each 4 portals of Holland Tunnel. Contr. H. T.-9. Plans deposit $10; adv. ENR, 10/24.

Bids Asked in January

Illinois — TRANSMISSION LINE — Illinois Rural Electric Co-operative, S. R. Faris, mgr., Winchester, rural electric, transmission and distr. facilities, Calhoun Co. $295,000. Stanley Eng. Co., Muscatine, Ia., engr.

SOON LETS CONTRACT

Alabama — DISTRIBUTION LINES, etc. — Alabama Electric Co-operative, Inc., Andalusia, soon lets contract power plant and distribution lines, Andalusia, Contr. R-1, turbine water wheel; Contr. R-2, waterwheel generator; Contr. S-1, oil circuit breakers; Contr. S-2, transformers, Burns & McDonnell, 107 W. Linwood St., Kansas City, Mo., engrs. CD 9/25—ENR 10/17.

Illinois—RURAL ELECTRIC LINES—Southeastern Illinois Electric Co-operative, Harrisburg, soon lets contract 72 extens. approx 138.57 mi. to existing rural electric lines in Franklin, Hamilton, White, Williamson, Saline, Gallatin, Johnson, Pope and Hardin Counties. Michael Drazen & Assoc., 4903 Delmar Blvd., St. Louis 8, Mo., engrs. CD 9/23—ENR 9/26.

UNCLASSIFIED (Low Bidders, Cont'd.)

LOW BIDDERS

N. Y., New York — ZOO — N. Y. State Conservation Dpt., 15 Maiden Lane, Zone 7, imprv. Bronx Zoo and Park, from Delma Eng. Co., 1208 Wyatt St., Zone 60. **$472,592.**

CONTRACTS AWARDED

Calif., Vernon — OIL STORAGE — Filtrol Corp., 3250 E. Washington Blvd., Los Angeles, tanks, foundations, walls, pits, tower and oil storage facilities, to Fluor Corp., Ltd., 2500 S. Atlantic Blvd., Los Angeles. Approx. **$52,500.**

Ia., New Hampton — HEATING SYSTEM — City, A. Griffith, clk., municipal heating sys. exten., to Grudem Brothers, 2645 University Ave., St. Paul, Minn. **$132,700.** Bids 10/14. CD 9/18—ENR 9/26.

R. I., Providence—COAL TERMINAL—Curran & Purton, Inc., 500 Allens Ave., rebuilding Tretle Coal Terminal, Allen Ave. Owner builds. **$60,000.**

Tennessee — POWER LINES — Tennessee Valley Electric Co-operative, Savannah, 76.1 mi. power lines, Hardin Co., to Industrial Electric & Supply Co., 62 Auction St., Memphis. **$80,896.** Allen & Hoshall, 65 McCall Pl., Memphis, consult. engr. CD 6/13—ENR 6/27.

Tex., Houston—GAS MAINS—United Gas Corp., United Gas Bldg., natural gas mains and lateral natural gas lines. Owner builds. **$280,000.** CD 1/14—ENR 1/24.

Wash., Seattle — FERRY HOUSE, etc. — Puget Sound Navigation Co., Colman Dock, Zone 4, repairing altering Colman ferry bldg., and pier to Manson Constr. & Engr. Co., 821 Alaskan Way, Seattle, Zone 4. Est. **$200,000.**

B. C., Port Alberni — ELECTRIC LINE — National Utilities Corp., Ltd., Port Alberni, rural electrification scheme, to Hume & Gumble Ltd., 15 E. 2 Ave., Vancouver. **$75,000.** Awarded 10/15.

PROPOSED PROJECTS

Including class of projects previously listed as *postwar*.

COMMERCIAL BUILDINGS

PROPOSED WORK

Calif., Los Angeles—Huntington Library & Art Gallery, San Marino, plans by Kaufmann, Lippincott & Eggers, 627 S. Carondolet Pl., and A. C. Martin & Assoc., consult. archts., 333 S. Beaudry Ave., office bldg., 6 St. and St. Paul Ave. **$500,000.** Westinghouse Electric Corp., S. San Pedro St., Lessee.

Calif., Palm Springs—Owner, c/o F. H. Gentry, consult. engr., Insurance Exchange Bldg., Long Beach, preliminary plans 2 story, 450x290 ft. 200 room hotel. Over **$205,000.**

Conn., East Haven—East Haven Homes, Inc., 273 Main St., plans by Henry S. Kelley, 282 York St., New Haven, seven 2 story 60 family garden apartments, Main St. and Bradley Ave. **$225,000.**

Conn., Glastonbury—Carl E. Larson & Son, Marlboro, small, frame homes on 20 acre site. **$265,000.**

Conn., Glastonbury—Charles E. Littel, Chestnut Hill Rd., 35 one acre sites with home, Chestnut Hill Rd. Over **$205,000.**

Conn., Hartford—Grace Lutheran Church, F. W. Tiechmann, pastor, Hartford, 1 story, bsmnt., brick, stone church, incl. chancel, parish house and sacristry, recreation facilities **$205,000.** Cherry & Matz, 313 E. 38 St., New York, N. Y., archts.

Conn., Moodus—David Bockstein, Bashan Lake, Moodus, plans under way frame houses on 30 acre site. **$265,000.**

Conn., New London—Bd. Trustees Lawrence & Memorial Hospital, Ocean Ave., preliminary plans by Scholfield & Lindsay, 309 State St., 4 story, 50x155 ft., brick, rein.-con. hospital, F. L. Palmer Unit., Ocean Ave. **$400,000.**

Del., Hillcrest (Wilmington P.O.)—St. Marks Evangelical Church, L. H. Doane, bldg. chn., Equitable Trust Bldg., Wilmington, plans by Robinson, Stanhope & Manning, Equitable Trust Bldg., Wilmington, church and Sunday School bldgs. **$250,000.** Financing provided.

Ga., Dublin—Dublin and Laurens County Development Co., Dublin, 100 houses. **$500,000.** Financing provided.

Ind., Lawrence—J. C. McCormick, **4502** Mitchner St., Indianapolis, shopping center, incl. 12 to 15 stores, each individually-owned but built as a group on 6 acre tract at Road 67 and Hunter St. **$200,000** or more.

Ind., New Albany—St. Marys R.C. Church, Rt. Rev. Father Wm. A. Jochum, pastor, 415 E. 8 St., New Albany, plans completed by Wm. C. Findt, 522 Elsby Bldg., 2 story, 69x135 ft.—63x107 ft., brick, stone, structural steel Parochial School. **$220,000.** Financing provided.

Ia., Dubuque—Clarke College Alumnae Assn., W. Locust and Seminary Sts., plans by C. I. Krajewski, 1775 S. Grandview St., Dubuque, 4 story, brick, rein.-con. steel, stone library and services bldg., connected with administration bldg., through an arcade. **$350,000.** CD 10/3.

★**Ia., Waterloo**—Scholtz Memorial Hospital, c/o Bd. Trustees, Presbyterian Hospital Assn., Waterloo, plans completed by Skidmore, Owings & Merrill, 100 W. Monroe St., Chicago, Ill., 100-bed capacity hospital. **$1,000,000.** Financing provided.

Md., Baltimore—Morgan State College, Hillin Rd. and Arlington Ave., plans by Gandreau & Gandreau, 527 N. Charles St., 1 story, bsmnt., 100 x 160 ft., stone dining hall. **$300,000.** Egle & Gompf, 425 St. Paul Pl., mechanical engr. Faisant & Kooken, 347 N. Charles St., structural engr.

Md., Baltimore—Mt. St. Josephs College, 4403 Frederick Ave., plans by James R. Edmunds, Jr., 130 W. Hamilton St., 1 story, bsmnt., 140x172 ft., brick, limestone memorial bldg., incl. assembly hall, gymnasium, shower, locker and rest rooms. **$400,000.** Financing not provided.

★**Mass., Cambridge**—Massachusetts Institute of Technology, 77 Massachusetts Ave., plans completed 3 story, 153x405 ft. library. **$2,000,000.** Financing provided.

Mich., Adrian—Tri-County Telephone Co., E. R. Vaughan, vice pres., South Haven, telephone bldg. and exchange. **$500,000.** Financing provided.

Mich., Muskegon — George Montgomery, Montgomery Bldg., plans by Harry E. Magnuson, 135 E. Grand Ave., brick, steel, concrete store and office bldg. **$250,000.**

Mo., St. Joseph—Missouri Methodist Hospital, 8 and Faron Sts., hospital addn. **$600,000.**

★**Mo., St. Louis**—May Department Stores Co., M. J. May, pres., c/o Famous Barr Department Store, Railway Exchange Bldg., 601 Olive St., plans by P. John Hoener, 3415 S. Kingshighway Blvd., Zone 9, 3 story, bsmnt., brick, concrete, stone, steel department store, Kingshighway Blvd. and Chippewa St. **$1,350,000.** CD 8/13—ENR 8/23.

Mo., St. Louis—Presbyterian Church in United States, c/o Rev. Dr. W. H. McCorkle, pastor, Westminster Presbyterian Church, 5300 Delmar Blvd., Zone 12, rein.-con., brick, stone hospital. Over **$210,000.**

Mo., St. Louis—St. Louis University, Rev. P. J. Holloran, S. J., pres., 221 N. Grand Blvd., Zone 3, plans by H. P. Hess, 4005 W. Florissant Ave., 4 story, bsmnt., brick, stone rein.-con., classroom bldg., Lindell Blvd., west of Grand Blvd., adjacent to Commerce & Finance School bldg. **$400,000.**

Mo., Springfield—Drury College, J. F. Findlay, pres., Springfield, 150 x 166 ft., brick, tile, steel, stone field house with 17 x 75 ft. offset. **$205,000.** D. R. Sandford & Sons, Woodruff Bldg., archts. CD 12/28/45—ENR 1/10/46.

Mo., Springfield—Springfield Masonic Temple Assn., 315½ E. Walnut St., masonic temple on 212 x 250 ft. site in 600 block of South National Ave. Over **$205,000.** Site purchased.

N. J., Haddonfield—Roman Catholic Diocese of Camden, The Most Reverend Bartholomew Eustace, Bishop, 721 Cooper St., Camden, plans by P. C. Reilly, 111 5 Ave., New York City, N. Y. Home for the Aged. Over **$205,000.** Financing provided.

N. J., Westfield — Westfield Presbyterian Church, Westfield, plans completed altering church and new assembly hall. **$265,000.** Financing provided.

N. Y., Flushing—Metropolitan Home Builders, c/o Samuel S. Paul, archt., 163-18 Jamaica Ave., Jamaica, plans completed 41 two story, 1-family houses, 26 Ave., 160 and 163 Sts. **$287,000.** Financing provided. CD 8/14—ENR 8/22.

N. Y., New York—C. F. Noyes Co., 40 Wall St., Zone 5, plans completed office bldg. for Aetna Insurance Co., 100 William St. **$232,520.** Financing provided.

N. Y., Queens Village—Queens Estates, c/o Alwin Cassens Jr., archt., 92-32 Union Hall St., Jamaica, plans completed 34 one-family houses, 249 St., 81 Ave., Union Turnpike. **$289,000.** Financing provided.

★**N. Y., Yonkers**—S. R. Anthony, 11 W. 46 St., New York, Zone 19, 500 homes on 75 acre tract in Round Hill Dr. area. **$2,000,000.**

N. C., Charlotte—United Candy Co. Inc., c/o E. T. James, Jr., pres., 2016 W. Morehead St., apartment hotel, 80 to 100 dwellings, Elizabeth Ave. Over **$300,000.** Site purchased.

O., Bellefontaine—New York Central System, S. E. Armstrong, engr. M. W. System, 466 Lexington Ave., New York, 17, N. Y., depot and office. Financing provided.

O., Columbus—Church of Nazarene, Rev. W. E. Boggs, Parsons Ave., plans by John Quincy Adams, 35 S. Champion St., 2 and 3 story church, 18 and Kossuth Sts. Financing not provided.

O., Lima—Diocese of Toledo, c/o Bishop K. J. Alter, 2544 Parkwood St., Toledo, church, school, rectory, convent and auditorium for new Catholic Parish in West Lima on 350x600 ft. site.

O., Toledo—D. L. Haase, 2832 S. 109 St., 30-family apartment project from 305 St. to Maumee Bay. Over **$200,000.** Legal obstacles to be overcome.

Okla., Ada — First Methodist Episcopal Church, Ada, plans by Albert S. Ross, Ada, church. **$225,000.** Financing not provided.

Pa., Bala Cynwyd—Bala Cynwyd Methodist Episcopal Church, Rev. Franklin Duncombe, pastor, 214 Levering Mill Rd., plans completed by Charles W. Bolton & Son, 1505 Race St., Phila., Sunday School bldg. Over 205,000. Financing provided.

Pa., Collegeville—Ursinus College, Dr. Norman McClure, pres., plans by George M. Ewing, Real Estate Trust Bldg., Phila., women's dormitory, **$250,000;** men's dormitory, **$250,000.** Financing provided.

Pa., Lewisburg—Evangelical Hospital plans by George M. Ewing, Real Estate Trust Bldg., Phila., hospital addn. **$250,000.** Financing provided.

Pa., Linwood—Linwood Methodist Church, Rev. Clarence Howell, pastor, 223 Chichester Ave., church. **$250,000.**

Pa., Monongahela—Monongahela Memorial Hospital, Monongahela, plans by Alan C. Brenton, 407 Lincoln Ave., Charleroi, 4 story, 75x110 ft., brick, steel hospital addn. **$210,000.**

Pa., Phila.—Presbyterian Church of Chestnut Hill, Rev. Burleigh Cruikshank, 8708 Germantown Ave., plans by Barney & Banwell 1411 Walnut St., church plant. Over **$205,000.** Financing provided.

Pa., Phila.—Friends Hospital for Mental & Nervous Diseases, Adams Ave. and Roosevelt Blvd., plans by Sydney E. Martin, Harry G. Stewart & John Lane Evans, assoc. archts., 1700 Walnut St., hospital addns., expansions. **$500,000.** Financing provided CD 9/28 45—ENR 10/11/45.

Pa., Phila.—Jefferson Medical College, 1025 Walnut St., plans by W. R. Morton Keast, 1201 Chestnut St., tuberculosis hospital addns., alterations, reconversion, 739 S. Broad St. Over **$205,000.** Financing provided.

★**Pa., Phila.**—University of Pennsylvania, Dr. George W. McClelland, pres., 34 St. and Woodland Ave., bldg. addns. School of Medicine, **$5,000,000;** bldg. for Dpt. of Physics, Mathematics and Astronomy, **$2,000,000;** hospital, **$5,000,000;** bldg. for Wharton School of Finance & Commerce, **$2,000,000;** library, **$6,000,000;** Women's Residence Bldgs. A to E inclusive, **$500,000** each; Fine Arts Bldg. addn, **$1,000,000;** botany bldg. addn., **$1,000,000;** psychology bldg. addn. **$1,000,000;** men's dormitories addn., alterations, **$1,000,000;** law school addn. **$1,000,000;** Towne Scientific School addn. **$1,000,000.** Financing not provided.

★**Pa., Swarthmore** — Swarthmore College plans by Sydney E. Martin, Harry G. Stewart & John Lane Evans, assoc. archts., 1700 Walnut St., library, **$400,000;** science bldg., **$350,000;** women's gymnasium, **$250,000,** women's dormitory, **$250,000.** Financing provided. CD 6/20—ENR 7/4.

Pa., Upper Darby—St. Cyrils of Alexandria R.C. Church, Rev. Edmund O'Shea, rector, 150 Lewis Ave., East Lansdowne, plans by Henry Dagit & Sons, 1329 Race St., Phila., church Over **$250,000.** Financing provided.

Pa., Waynesboro—Trinity Evangelical Reformed Church, Rev. George H. Bricker, pastor, 255 W. Main St., plans by Charles W. Bolton & Son, 1505 Race St., Phila., church, Sunday School and rectory. Over **$205,000.** Financing provided.

S. C., Greenville—Ivey-Keith Co., 125 N. Main St., plans by E. Paul Behles & Assoc., Inc., 331 Madison Ave., New York, department store. **$500,000.** CD 8/27—ENR 9/5.

Tenn., Nashville—Fiske University, 17 Ave. N., dormitory for women known as Scribner Hall. **$300,000.** Financing provided.

Tex., Austin—Austin Investment Co., Nalle Bldg. Annex, plans by Giesecke, Kuehne & Brooks, 121 E. 8 St., 3 story, bsmnt., masonry apartment. **$205,000.** Financing provided. H. W. Barr, 121 E. 8 St., assoc. archt.

Tex., Austin—H. F. Green, 4804 Evans St., plans under way, 1 story, 36x45 ft. sheet rock, residential constr., concrete slab fdn. **$210,000.** Financing provided.

Tex., Austin—The A Hotel Corp., Austin, plans completed by Page, Southerland & Page, Nalle Annex Bldg., 5 story, bsmnt. rein.-con. brick, stone, etc. student hotel **$205,000.** Financing provided. Matthews & Kenan, 1905 Transit Tower, San Antonio, consult. engrs.

★**Tex., Dallas**—Employers Casualty Co., Interurban Bldg., plans by G. Dahl, 1920½ Main St., 13 story, bsmnt., steel, concrete office bldg. **$1,000,000.** Financing provided. CD 8/9—ENR 8/15.

Tex., Fort Worth—Meadowbrook Methodist Church, 3900 Mt. Vernon St., plans by W. G. Clarkson, 610 First National Bank Bldg., 1 story, brick, tile church. **$205,000.** Financing provided.

Tex., Houston—St. John The Devine Church, 2450 River Oaks Blvd., plans by A. Sallsbury, 3501 Buffalo Dr., school. **$225,000.** Financing provided.

Tex., Houston—Temple Emanuel Synagogue, 1st Natl. Bank Bldg., plans MacKie & Kamrath, 1532 Peden St., 1 story, brick, rein.-con. synagogue. **$475,000.** Financing provided.

Tex., San Antonio—H. Bumbaugh Co., 102 Grandview Pl., plans under way, residential constr. **$225,000.** Financing provided.

Tex., San Antonio—First Baptist Church, 134 Fifth St. addnl. church. **$300,000.** Financing not provided. Site purchased.

Proposal Advertisements see pp. 26 to 28

OFFICIAL PROPOSALS

Official notices of bids wanted on construction and related work, equipment and material for government, state, municipal departments and private enterprises

RATE: *THE RATE FOR OFFICIAL PROPOSAL ADVERTISING IS 65 CENTS PER LINE (OR FRACTION) PER INSERTION*

COPY RECEIVED *UP TO 3:00 P. M. MONDAY FOR ISSUE OUT THURSDAY SUBJECT TO SPACE OPEN FOR LAST MINUTE ADS*

SEND COPY *TO OFFICIAL PROPOSAL DIVISION, ENGINEERING NEWS-RECORD, 330 W. 42ND ST., NEW YORK 18, N. Y.*

OFFICIAL PROPOSALS

Bids: October 30, 1946 (289)

Beach Protection

Sealed proposals covering Beach Protection (Steel Sheet Pile Jetties) at Southampton Beach in the Village of Southampton, Suffolk County, New York, will be received by Henry A. Cohen, Director, Bureau of Contracts and Accounts, Department of Public Works, The Governor Alfred E. Smith State Office Building, Albany, N. Y. on behalf of the Department of Public Works, until 10:30 o'clock A. M. (Eastern Standard Time) on Wednesday, October 30, 1946, when they will be publicly opened and read. The approximate amount of this project is $60,500.

Each proposal must be made upon the form and submitted in the envelope provided therefor and shall be accompanied by a certified check made payable to the State of New York, Commissioner of Taxation & Finance, of 5% of the amount of the bid as a guaranty that the bidder will enter into the contract if it be awarded to him. The title of the work must be written on the front of the envelope, sealed and delivered to Henry A. Cohen, Director, Bureau of Contracts and Accounts, The Governor Alfred E. Smith State Office Building, Albany, N. Y. The blank spaces in the proposal must be filled in, and no change shall be made in the phraseology of the proposal. Proposals that carry any omissions,, erasures, alterations, or additions may be rejected as informal. Successful bidder will be required to give a bond conditioned for the faithful performance of the contract and a separate bond for the payment of the laborers and material men, each bond in the sum of 100% of the amount of the contract or contracts in excess of $500. Corporations submitting proposals shall be authorized to do business in the State of New York. Drawings and specifications may be examined free of charge at the following offices:

Guy W. Pinck, Deputy Chief Engineer, The Governor Alfred E. Smith State Office Building
Albany, N. Y.
State Architect, State Office Building, 80 Center Street
New York City
J. J. Darcy, District Engineer, Montauk Highway at Little East Neck Road, Babylon, L. I., N. Y.

Drawings and specifications may be obtained from the Director, Bureau of Contracts and Accounts, The Governor Alfred E. Smith State Office Building, Albany, N. Y. or J. J. Darcy, District Engineer, Montauk Highway at Little East Neck Road, Babylon, L. I., N. Y. upon deposit of $5.00 for each set.

Checks for plans and specifications shall be made payable to the State of New York.

Proposal blanks and envelopes will be furnished without charge.

CHAS. H. SELLS, Superintendent
N. Y. State Department of Public Works.

Bids: December 16, 1946 (292)

Construction Work

Sealed bids or proposals will be received by the City of Hollidays Cove, West Virginia, until twelve o'clock (12.00) noon, Eastern Standard Time, December 16, 1946, in the Office of the City Clerk, 125 Cove Road, Hollidays Cove, West Virginia, for the following work:

Contract No. 1: Intake Pier and Pump Station, including about 750 cubic yards of reinforced concrete in the intake pier, two deep well turbine type pumps, structural steel access bridge, piping, valves, controls, etc.

Contract No. 2: Water Mains, including cast iron pipe of various sizes from four (4") inch to sixteen (16") inch, cast iron fitting, gate valves, etc.

OFFICIAL PROPOSALS

Contract No. 3: Distributing Reservoir of about 6 M.G. capacity and including approximately 4000 cubic yards of reinforced concrete, valves, etc., and

Contract No. 4: Water Treatment Plant, including 2900 cubic yards of reinforced concrete in the settling basins, mixing tanks, filters, and sub-structures, and brick superstructure, piping, valves, water treating equipment, filters and appurtenances.

Plans and specifications may be obtained from Alfred LeFeber, Consulting Engineer, 713 Temple Bar Bldg., Cincinnati 2, Ohio, upon deposit of ten dollars ($10) for each set of contract drawings. Five dollars ($5) will be refunded for each set of contract drawings and specifications returned in good condition.

City of Hollidays Cove
West Virginia
by Myron H. Campbell
Acting Mayor

Bids: October 30, 1946 (293)

State Highway Work

STATE DEPARTMENT OF PUBLIC WORKS
BUREAU OF CONTRACTS & ACCOUNTS
ALBANY, N. Y.

Sealed Proposals will be received by Henry A. Cohen, Director, Bureau of Contracts & Accounts, 14th Floor, The Governor Alfred E. Smith State Office Building, Albany, N. Y., until ten-thirty o'clock A.M., eastern standard time, on WEDNESDAY, OCTOBER 30, 1946, for the construction and reconstruction of highway projects in the following counties:

County	Deposit for plans	Bid deposit	Type	Miles	Dept. estimate
CONSTRUCTION					
Kings	$10	$10,000	Misc. Work Sheet Asphalt Pvt.	1.00	$357,000
Onondaga	10	55,000	Foundation Crse. R.O.B.; Grading; Twin Box span, 2 @ 14'; Conc. Slab span 42'	3.37	930,000
RECONSTRUCTION					
Allegany	10	25,000	Fdt. Crse. R.O.B. Gravel Bituminous Treated	2.47	433,000
*Broome & Tioga	10	30,000	I-Beam 80'; 2 @ 75'; Top Crse. Grd. Gravel Grading and Structures	3.40	526,000
Cortland	5	22,000	Conc. 8" thk.; 32', 22' Wid.	3.97	413,000
Hamilton	20	55,000	Top Crse. Asphalt Conc. Opt.	9.22	973,000
Jefferson	20	32,000	Conc. 8" thk.; 22', 30', 35', 45' Wid.; Conc. Widen. Misc. Work	14.02	580,000
*Tioga	20	43,000	Conc. 9" Thk. 24' Wid. Asphalt Conc. Opt. Misc. Work: I-Beam 3 spans 80' each	6.22	806,000
Washington	20	30,000	Graded Gravel: Double Surface Treatment	9.18	540,000

* These projects involve the use of Alpha Composite Construction which is patented and the royalty is
Broome & Tioga $588.35
Tioga $287.49

Maps, plans, specifications, and estimates may be obtained at the office of the Department of Public Works, Bureau of Contracts & Accounts, Albany, N. Y., and at the office of the District Engineers in whose district the roads are located. The names and addresses of the District Engineers will be furnished on request and may be seen at the office of the State Department

OFFICIAL PROPOSALS

of Public Works, State Office Building, Room 898, Worth & Center Streets New York City.

The deposit for Plans and Proposal Forms for each contract containing 1 to 15 sheets is $5.00; 16 to 30 sheets, $10.00; over 30 sheets, $20.00. A refund will be made in full to bidders for return of one set, in good condition, within 30 days of award, or rejection of bids; refund for all other sets in good condition, similar period, will be 50% of deposit.

Special attention of bidders is called to "General Information for Bidders" in the proposal, specifications, and contract agreement, and to the special provisions applying to projects financed with federal funds.

Proposal for each contract must be submitted in a separate sealed envelope with the name and number of the contract plainly endorsed on the outside of the envelope. Each proposal must be accompanied by cash, draft or certified check payable to the order of "State of New York, Commissioner of Taxation & Finance" for the sum as specified in the advertisement and the proposal. The retention and disposal of the bidding check, the execution of the contract and bonds shall conform to the provisions of the Highway Law, as set forth in "Instructions to Bidders."

When optional types are permitted on contracts with federal funds, bidders must state in the space provided in the proposal the exact designation of the optional type upon which the proposal is predicated.

Minimum Wage Rate per hour for above work shall be as follows:

County	Skilled Labor	Intermediate Grade Labor	Unskilled Labor
Allegany	$0.80	$0.80	$0.80
Broome	1.00	1.00	1.00
Cortland	0.80	0.80	0.80
Hamilton	0.80	0.75	0.75
Jefferson	0.80	0.80	0.80
Kings	1.20	1.20	1.20
Onondaga	1.10	1.10	1.10
Tioga R.C. 46-136	0.80	0.80	0.80
Tioga R.C. 46-138	1.00	1.00	1.00
Washington	0.80	0.80	0.80

Bids: November 12, 1946 (299)

Construction of Pumps & Pump Rooms

THE PORT OF NEW YORK AUTHORITY
HOLLAND TUNNEL
PORTAL SUMPS, PUMP ROOMS AND PUMPS
CONTRACT HT-9

Sealed proposals for the construction of pumps and pump rooms and furnishing and installing pumping equipment at each of the four portals of the Holland Tunnel will be received at the office of the Executive Director of The Port of New York Authority, Number 111 Eighth Avenue, New York 11, N. Y., until 11:00 o'clock, on the morning of Tuesday, November 12, 1946, and thereafter in the Auditorium of the Port Authority at the same address until 11:30 A. M., on the same date, at which latter time and place said proposals will be publicly opened and read.

Contract documents may be seen at the Office of the Chief Engineer, The Port of New York Authority, Room 1538, 111 Eighth Avenue, New York City, and copies will be furnished upon deposit of $10.00 per set. The deposit will be remitted if the documents are returned in good condition, not later than thirty days after the opening of proposals.

THE PORT OF NEW YORK AUTHORITY
Howard S. Cullman,
Chairman.

(Continued on opposite page)

OFFICIAL PROPOSALS
(Continued from opposite page)

Bids: November 4, 1946 (290)

State Highway Work

STATE OF NEW JERSEY
STATE HIGHWAY DEPARTMENT
TRENTON

NOTICE IS HEREBY GIVEN that sealed bids will be received by the State Highway Commissioner for:

ROUTE 4 (PARKWAY), SECTION 6
Construction of Route 4 (Parkway), Section 6, from Central Avenue to Lehigh Valley Railroad (Grading), in Clark and Cranford Townships, Union County, length 2.060 miles. Federal Project No. U-188 (2) Estimated: 53,184 cu. yds. Roadway Excavation-Earth
1,000 cu. yds. Wet Excavation
20,964 cu. yds. Excavation-Unsuitable Material
413,878 cu. yds. Borrow Excavation

Bids for the above will be received at the office of the State Highway Department, Room 102, State House Annex, Trenton, N. J., on Monday, November 4, 1946, at eleven o'clock (11:00 A.M. EASTERN STANDARD TIME, and will be opened and read immediately thereafter.

The receipt and opening of bids is subject to the proper qualification of the bidder in accordance with the provisions of the prequalification law and the regulations adopted by the State Highway Commissioner. Bidders must also submit a revised financial statement and statement of plant and equipment with their bid.

NOTE: The proposed project is a "Federal Aid Project" authorized by the provisions of Title 27 of the Revised Statutes of New Jersey and supplements, and by Sections 2, 3 and 4, P. L. 521, 78th Congress, and is to be performed in accordance with the special provisions and requirements of the Federal Works Agency, Public Roads Administration, as outlined in the specifications, which provisions require that labor be employed from lists furnished by the U. S. Employment Service, 1177-79 E. Grand Street, Elizabeth, New Jersey. The attention of bidders is directed to the special provisions covering subletting or assigning the contract and to the use of domestic materials. The minimum wage paid to all unskilled labor employed on this contract shall be 65¢ per hour. The minimum wage paid to all intermediate grade of labor employed on this contract shall be 75¢ per hour. The minimum wage paid to all skilled labor employed on this contract shall be $1.25 per hour.

Drawings, specifications and form of bid, contract and bond for the proposed work are on file in the office of the State Highway Department, Trenton, N. J., and may be inspected by prospective bidders during office hours. Plans will be furnished on a deposit of Ten Dollars ($10.00) for each set of plans upon application to A. Lee Grover, Chief Clerk, State Highway Department, Room 102, State House Annex, Trenton, N. J. Bids must be made upon the standard proposal forms in the manner designated in the standard State Highway specifications and must be enclosed in sealed special addressed envelopes bearing the name and address of the bidder and work bid upon on the outside, and must be accompanied by a certified check drawn to the order of the Treasurer of the State of New Jersey for not less than ten percent (10%) of the amount of the bid, provided that the said certified check shall not be less than $500.00 nor more than $20,000.00 and must be delivered at the above place on or before the hour named. Copies of the standard proposal forms and special addressed envelopes will be furnished on application. Bids not enclosed in sealed special addressed envelopes will be considered informal and will not be opened. The right is reserved to reject any or all bids.

Signed: Spencer Miller, Jr.
State Highway Commissioner

Bids: November 14, 1946 (298)

Sewer Construction

PORT WASHINGTON SEWER DISTRICT,
PORT WASHINGTON, NEW YORK.

Sealed proposals for furnishing all material and doing all work necessary to complete the construction of about 38,000 feet of vitrified clay sewers, all as shown on the plans together with the necessary branches, house connections to property lines, manholes, flush tanks, connections to existing sewers, and other necessary appurtenances will be received by the Board of Sewer Commissioners of the Port Washington Sewer District, at their office in Port Washington, New York, until 8 p. m., November 14th, 1946, at which time and place the proposals will be publicly opened and read.

OFFICIAL PROPOSALS

Notice to Bidders, Forms of Proposal and Contract, Plans and Specifications can be obtained at the office of the Board of Sewer Commissioners, at Port Washington, and at the office of Clarence MacCallum, Consulting Engineer, at 27 William Street, New York, N. Y., on the dates of October 25 to November 14 inclusive, upon the payment of $20.00 cash, of which $10.00 will be refunded if the plans are returned complete and in good order within five days after opening or bids. Each bid must be accompanied by certified check of the bidder to the order of the Board of Sewer Commissioners, Port Washington, N. Y., for the sum of $15,000.

The checks of unsuccessful bidders will be returned within ten days after making the awards.

The Commissioners reserve the right to reject any or all bids and to waive any informalities in any or all of the bids received and to accept any bid which they deem to be most favorable to the interest of the District.

PORT WASHINGTON SEWER DISTRICT
BOARD OF SEWER COMMISSIONERS.
Fred A. Thatcher,
Secretary.

U. S. Government

BIDS FOR MAINTENANCE DREDGING—U. S. Engineer Office, Baltimore, Maryland—Sealed bids will be received here until 11:00 AM, EST, 1 November 1946, and then opened, for maintenance dredging of approximately 560,000 cubic yards of material from Sinepuxent Bay near Ocean City, Maryland. Further information upon application. (295)

UNITED STATES DEPARTMENT OF THE INTERIOR, Bureau of Reclamation, Washington, D. C., October 7, 1946. Sealed bids (Specifications No. 1495) will be received at the office of the Bureau of Reclamation, Denver, Colorado, until 2 p.m., November 19, 1946, and will at that hour be opened, for furnishing and delivering fob cars at the shipping point or fob cars at Cody and Garland, Wyoming, at the option of the bidder, three (3) 2,000-kva, 69,000 delta- to 34,500 delta-volt, single-phase, 60-cycle, oil-immersed, self-cooled, outdoor-type transformers for Heart Mountain switchyard, each with one single-pole, station-type lightning-arrester for 69,000-volt, 3-phase, ungrounded-neutral circuit and one single-pole, station-type lightning-arrester for 34,500-volt, 3-phase, ungrounded-neutral circuit mounted on the case; three (3) 2,000-kva, 69,000 delta- to 34,500 delta-volt, single-phase, 60-cycle, oil-immersed, self-cooled, outdoor-type transformers for Garland substation, each with one single-pole, station-type lightning-arrester for 69,000-volt, 3-phase, ungrounded-neutral circuit and one single-pole, station-type lightning-arrester for 34,500-volt, 3-phase, ungrounded-neutral circuit mounted on the case; one (1) 15-kva, 33,000- to 120/240-volt, single-phase, 60-cycle, oil-immersed, self-cooled, outdoor-type distribution transformer with standard taps, suitable for operation at an elevation of 4,300 feet above sea level, for Garland substation; six (6) single-pole, pallet or autovalve, outdoor, distribution-type lightning-arresters, for bracket mounting and suitable for use on 2,400-volt, 3-phase, ungrounded-neutral circuits for Heart Mountain switchyard, Shoshone Project, Wyoming. The apparatus will be installed by the Government. The specifications do not contain a provision for liquidated damages for delay. No charge for copies of the specifications to prospective bona fide bidders; to others $0.75, not returnable. For particulars, address the Bureau of Reclamation, Denver 2, Colorado, or Washington 25, D. C.

Michael W. Straus,
Commissioner.
(297)

Federal Works Agency, Public Buildings Administration, Washington, D. C., Oct. 17, 1946.—Sealed bids in duplicate will be publicly opened in this office at 1 P. M., Nov. 14, 1946, for construction of Hangars 7, 8, 9, 11, 12, Washington National Airport at Gravelly Point, Virginia. Upon application, one set of drawings and specifications will be supplied free to each general contractor interested in submitting a bid and MUST be returned to this office. Contractors requiring additional sets may obtain them by purchase from this office at a cost of $25 per set, which will not be returned. Checks offered as payment must be made payable to the order of the Treasurer, U. S. One set upon request, will be furnished, in the discretion of the Commissioner, to quantity surveyors and to builders' exchanges, chambers of commerce or other organizations who will guarantee to make them available for any interested sub-contractor or material firm but this privilege will be withdrawn if the sets are not returned after they have accomplished their purpose. W. E. Reynolds, Commissioner of Public Buildings, Federal Works Agency. (296)

U. S. Government

UNITED STATES DEPARTMENT OF THE INTERIOR, Bureau of Reclamation, Washington, D. C., October 1, 1946. Sealed bids (Specifications No. 1491) will be received at the office of the Bureau of Reclamation, Denver, Colorado, until 10 a.m., November 4, 1946, and then publicly opened, for furnishing labor and materials and performing all work for the *construction of Davis Dam-Kingman, 69-kilovolt transmissionline, Davis Dam Project*, Arizona-Nevada. The general location of the transmissionline is in the western part of the State of Arizona. The transmissionline to be constructed under these specifications will be a 69-kilovolt, 3-phase, single-circuit, 60-cycle, wood-pole, H-frame-type transmissionline, approximately 28 miles long. The transmissionline will extend from the Davis Dam construction substation to a point approximately 1½ miles northwest of Kingman, Arizona, where it will be connected to an existing 69-kilovolt transmissionline. There will be one complete transposition barrel in the line. The transmissionline has been designed for light-loading conditions of no ice and a wind pressure of 12 pounds per square foot at 30° F. The conductor for the line will be No. 2/0 Awg. aluminum cable, steel-reinforced. Each pole of each structure will be provided with a ground-wire. Two overhead groundwires will be strung for one-half mile from the Davis Dam construction substation. One disconnecting-switch will be installed in the line near the point where the line is connected to the existing transmissionline, near Kingman, Arizona. Unless otherwise specified, all construction and clearances of the transmissionline to be constructed under these specifications shall conform to the fifth edition of the National Electrical Safety Code, issued by the United States Bureau of Standards. This invitation for bids does not cover the purchase of materials which are to be furnished by the Government. Materials to be furnished by the contractor and those furnished by the Government are described in the specifications which will be a part of the contract. The work shall be commenced within thirty (30) calendar days after date of receipt of notice to proceed and it is desired that all of the work be completed within two hundred and fifty (250) calendar days from the date of receipt by the contractor of such notice. Bid bond.—Guarantee will be required with each bid in an amount not less than 10 percent of the amount of the bid: *Provided*, That guarantee in excess of $2,000,000 will not be required Performance bond.—Where the total amount payable by the terms of the contract is not more than $1,000,000, a performance bond will be required in the sum of one-half of the total amount payable by the terms of the contract. Where the total amount payable by the terms of the contract is more than $1,000,000 and not more than $5,000,000, the performance bond shall be in the sum of 40 percent of the total amount payable by the terms of the contract. Where the total amount payable by the terms of the contract is more than $5,000,000 and not more than $10,000,000, the performance bond shall be in the sum of 30 percent of the total amount payable by the terms of the contract. Where the total amount payable by the terms of the contract is more than $10,000,000 and not more than $25,000,000, the performance bond shall be in the sum of 20 percent of the total amount payable by the terms of the contract. Where the total amount payable by the terms of the contract is more than $25,000,000, the performance bond shall be in the sum of $5,000,000. Payment bond.—Whenever the total amount payable by the terms of the contract shall be more than $2,000 but not more than $1,000,000, the payment bond shall be in the sum of one-half of the total amount payable by the terms of the contract. Whenever the total amount payable by the terms of the contract shall be more than $1,000,000 and not more than $5,000,000, the payment bond shall be in the sum of 40 percent of the total amount payable by the terms of the contract. Whenever the total amount payable by the terms of the contract shall be more than $5,000,000, the payment bond shall be in the sum of $2,500,000. The specifications do not contain a provision for liquidated damages for delay. Partial payments will be made monthly. (See Article 16 of the contract.) No charge to prospective bidders for copies of the specifications and drawings; to others $2.75 per copy, not returnable. For particulars, address the Bureau of Reclamation, Denver 2, Colorado, or Washington 25, D. C.

Michael W. Straus,
Acting Commissioner.
(294)

EMPLOYMENT OPPORTUNITIES

RATE: 15 CENTS A WORD, MINIMUM CHARGE $3.00

Positions Wanted **(full or part time individual salaried employment only), ½ the above rates, payable in advance.**

Box Numbers **in care of any of our New York, Chicago or San Francisco offices count 10 words additional in undisplayed ads.**

Discount **of 10% if one payment is made in advance for four consecutive insertions of undisplayed ads (not including proposals.)**

Copy for new advertisements received until 10 A. M. Friday for following Thursday's issue

POSITIONS VACANT

WANTED—ENGINEERS experienced in the design of sewers, sewage treatment plants and water treatment plants. State qualifications, experience and salary requirements. P-787, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

ENGINEERS, CIVIL, Sanitary, Structural. Consulting firm requires men with experience in preparation of plans for sanitary engineering projects or in work of similar nature. Permanent connection for men of acceptable qualifications. Please furnish complete record of experience, references and statement of approximate salary requirements. P-922, Engineering News-Record, 520 Michigan Ave., Chicago 11, Ill.

STRUCTURAL DETAILER, experienced in welded fabrication design for jobbing shop, salary open. P-984, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

ENGINEER-ESTIMATOR wanted, Plumbing, Heating, Air Conditioning. Firm located in Penna. College background desirable but not absolutely necessary. Permanent position. Salary $5000.00 to start. State age, education, experience in first letter. Send photo. P-970, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

SANITARY ENGINEER: Experienced in design sewer systems and sewage treatment plants, capable supervising designing draftsmen in preparation plans, specifications, estimates of cost, in office of consulting Engineers—Up-State New York. Firm now has commitments for at least eighteen months work with excellent future prospects. State age, education, experience, references, and salary desired. P-971, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

ESTIMATOR—Engineer to take complete charge of Structural Steel Erection & Reinforcing Setting Department. Field experience necessary as well as ability to make contacts with General Contractors. Located in New England, growing organization. Good opportunity for right man. Salary commensurate with ability to produce. P-985, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

CIVIL ENGINEER Wanted: General engineering, office and field. Steady work. Vacation—Sick time. Department of Public Works, Hudson, New York.

POSITIONS VACANT

EXCELLENT OPPORTUNITY—for a trained man of specialized experience to initiate a national selling program and assume complete supervision of marketing a new line of Welding Fittings for an old, established, prominent manufacturer of Pipe Couplings. Give full details in first letter—to LEM, Dresser Manufacturing Division, Bradford, Penna.

ESTIMATOR 30-45 years. Experienced commercial and residential building construction. Stable position and good salary for first class man. Write The Wadhams & May Co., 15 Lewis St., Hartford, Conn.

STRUCTURAL DESIGNERS and Draftsmen for Steam Power Plant Structures send inquiries to George C. Daniels, Commonwealth & Southern Corp. General Engineering Department, Jackson, Michigan.

WANTED: Instructors to teach structural design and building equipment courses to students in Schools of Architecture. P-103, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

CIVIL ENGINEER graduate for work in chemical plant, northern West Virginia. 90% design, 10% field. Subsidiary of large, well-established corporation. P-104, Engineering News-Record, 520 N. Michigan Ave., Chicago 11, Ill.

PARK ENGINEER, for design and preparation of detail plans, specifications and estimates for projects, including buildings, water supply sewage disposal, roadways, drainage etc. Field reconnaissance and inspection. P-105, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

POSITIONS WANTED

CIVIL ENGINEER, married, college graduate. 25 years experience in all types of Architectural and Industrial construction. Experience in office and field on large construction projects equally divided. Registered Structural Engineer. For the past six years in complete charge of large design office. Desires permanent position with Architect or Contractor. PW-107, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

CIVIL ENGINEER: age 32; registered. 8 years experience supervising design, construction and maintenance of plant, including mechanical trades in large shipyard. Also 1 year experience in quantity take-off and estimating. PW-109, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

POSITIONS WANTED

CONSTRUCTION SUPT.—Steady, reliable, 25 years experience all types construction. Capable of estimating, procuring and executing contracts. PW-108, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

SEWERAGE, Water Supply and Gas Pipeline Engineer: age 30, married, no graduate ex-seabee (3 yrs.) 8 years experience with consulting firms on preliminary surveys, reports, drafting, design and supervision of construction. Desire permanent position. Go anywhere. PW-106, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

CHEMICAL ENGINEER—1943 graduate from 5 year cooperative course desires work in Chemurgery, especially utilizing wood. Age 27, single, available immediately anywhere. PW-110, Engineering News-Record, 520 N. Michigan Ave., Chicago 11, Ill.

GRADUATE ENGINEER, 27, ex-army Engineer Officer experienced roads, bridges, small buildings maintenance, repairing of construction equipment, desires location in South or South-west. Foreign service considered. PW-111, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

CIVIL ENGINEER, Age 30. Honor graduate, 7 years experience structural design industrial buildings and bridges. Location immaterial. PW-112, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

CONSTRUCTION EXECUTIVE, thirty years experience all types building and heavy construction. Estimating, negotiating, purchasing, field supervision. Thorough Construction man and organizer, able to handle all details, available immediately for responsible position. Box 181, Hawthorne, N. Y. Telephone Pleasantville 1742.

CHIEF ESTIMATOR. Age 50—Graduate Engineer. Now employed. Desire work in the Southern or Western states. Conversant with all types of construction and present prices. Years of experience on heavy construction. PW-113, Engineering News-Record, 520 N. Michigan Ave., Chicago 11, Ill.

STRUCTURAL ENGINEER, registered, age 43. Thoroughly experienced in plant layouts, design, estimates and specifications for construction of chemical plants, power plants, industrial bldgs. rigid frames and heavy construction. Best references for efficiency. Qualified to take complete charge. PW-114, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

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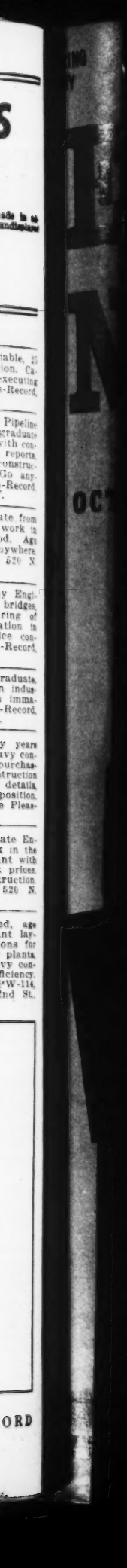
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